



Ebola frontline hospital guidance

April 2024

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Ebola frontline response plan approval

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Introduction

Description of EVD

Ebola virus disease (EVD) is a deadly disease with occasional outbreaks that occur mostly on the African continent. EVD commonly affects people and nonhuman primates (such as monkeys, gorillas, and chimpanzees). The disease is caused by an infection with a group of viruses within the genus *Ebolavirus*:

- Ebola virus (species *Zaire ebolavirus*)
- Sudan virus (species *Sudan ebolavirus*)
- Tai Forest virus (species *Tai Forest ebolavirus*, formerly *Côte d'Ivoire ebolavirus*)
- Bundibugyo virus (species *Bundibugyo ebolavirus*)
- Reston virus (species *Reston ebolavirus*)
- Bombali virus (species *Bombali ebolavirus*)

Of these, only 4 (Ebola, Sudan, Tai Forest, and Bundibugyo viruses) cause disease in people. Reston virus can cause disease in nonhuman primates and pigs, but no cases have been reported in people. Bombali virus was first identified in bats in 2018. Experts continue to investigate whether it causes disease in either animals or people.

Ebola virus was first discovered in 1976 near the Ebola River in what is now the Democratic Republic of Congo. Since then, the virus has been infecting people from time to time, leading to outbreaks in several African countries. Scientists do not know where Ebola virus comes from. Based on similar viruses, they believe EVD is animal-borne, with bats or nonhuman primates being the most likely source. Infected animals carrying the virus can transmit it to other animals, like apes, monkeys, duikers, and humans.

The virus is believed to first spread to people through direct contact with an animal's blood, tissue, and bodily fluids. Ebola virus then spreads human-to-human by direct contact with the body fluids of a person (or contaminated objects) who is sick with or has died from EVD. The virus gets into the body through broken skin or mucous membranes in the eyes, nose, or mouth. People can get the virus through sexual contact with someone who is sick with EVD or has recovered from EVD. The virus can persist in certain body fluids, like semen, even after recovery from the illness.

(Centers for Disease Control and Prevention (CDC), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID), Division of High-Consequence Pathogens and Pathology (DHCPP) and Viral Special Pathogens Branch (VSPB) April 27, 2021.

Case definitions

Person under investigation (PUI): Individuals with signs and symptoms consistent with Ebola virus disease (EVD) including:

- Fever
- Severe headache
- Muscle pain

- Weakness
- Fatigue
- Diarrhea
- Vomiting
- Abdominal (stomach) pain
- Unexplained hemorrhage (bleeding or bruising)

An [epidemiological risk factor](#) within 21 days (the incubation period) before the onset of symptoms.

- Confirmed Ebola case: Individuals with laboratory-confirmed diagnostic evidence of EVD (through molecular and/or serologic testing).

Ebola outbreak

Ebola outbreak area means a geographic area where Ebola virus transmission has occurred in the previous 42 days, or 1 case has been identified, as outlined by the [DHHS Ebola Disease Plan](#).

Transmission

Scientists think people are initially infected with Ebola virus through contact with an infected animal, such as a fruit bat or nonhuman primate. This is called a spillover event. After that, the virus spreads from person to person, potentially affecting a large number of people.

The virus spreads through direct contact such as through broken skin or mucous membranes in the eyes, nose, or mouth with:

- Blood or body fluids (urine, saliva, sweat, feces, vomit, breast milk, and semen) of a person who is sick with or has died from EVD
- Objects (such as needles and syringes) contaminated with body fluids from a person sick with EVD or the body of a person who died from EVD
- Infected fruit bats or nonhuman primates (such as apes and monkeys)
- Semen from a man who recovered from EVD (through oral, vaginal, or anal sex). The virus can remain in certain bodily fluids (including semen) of a patient who has recovered from EVD, even if they no longer have symptoms of severe illness.

When someone is infected with Ebola, they do not show [signs or symptoms](#) of illness right away. The Ebola virus CANNOT spread to others until a person develops signs or symptoms of EVD. Once a person infected with Ebola develops symptoms of illness, they can spread Ebola to others.

Ebola virus usually is not transmitted by food. However, in certain parts of the world, Ebola virus may spread through the handling and consumption of bushmeat (wild animals hunted for food). There is also no evidence that mosquitoes or other insects can transmit Ebola virus.

Additional EVD information

For more information on EVD, refer to the [DHHS Ebola disease website](#), or the CDC Ebola virus disease website located at [CDC EBOLA](#).

Tiered approach for hospital preparedness EVD evaluation, testing, and management

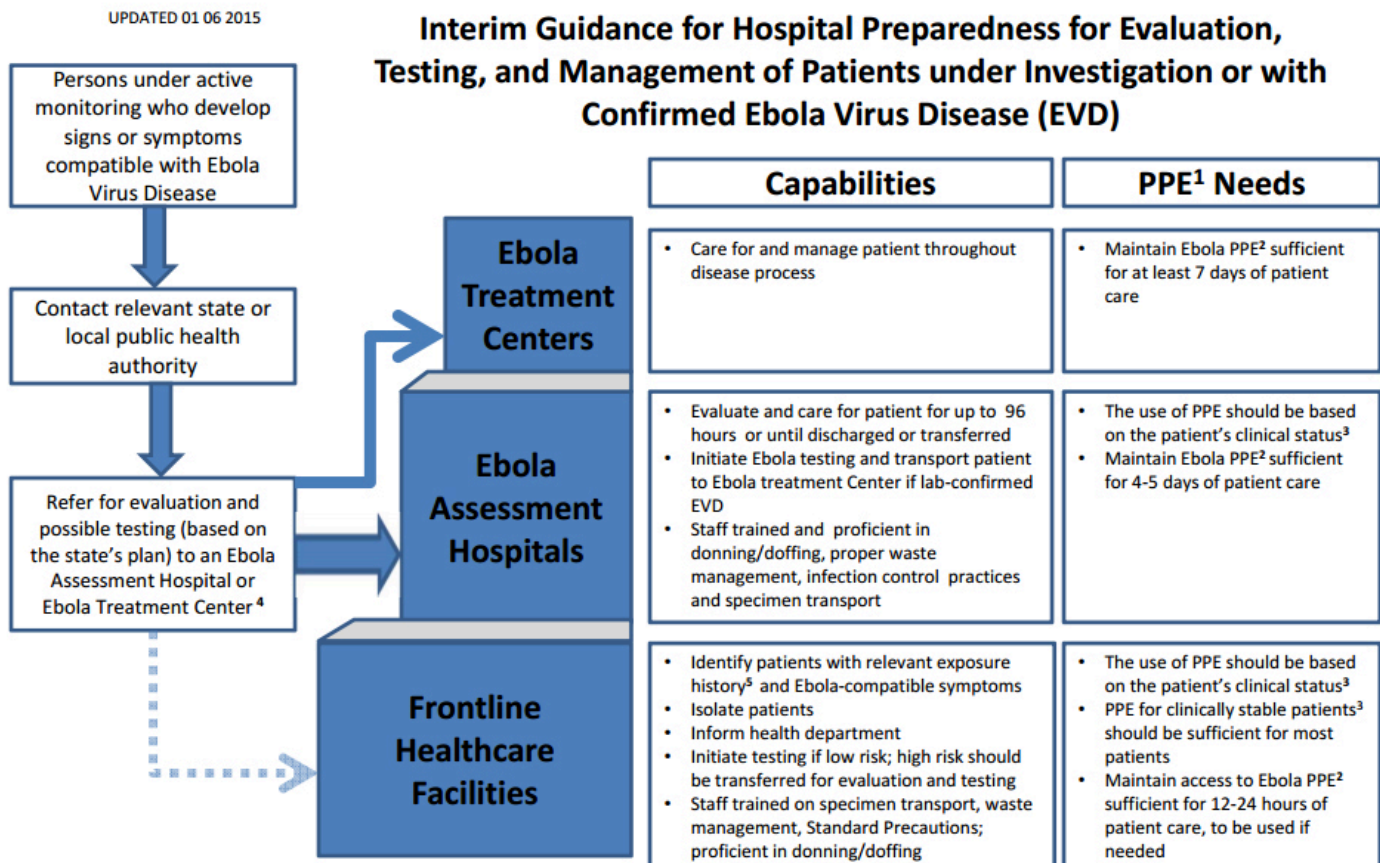
All acute care hospitals have an important role in preparing to identify, isolate, and evaluate a person who arrives at their facility with a history and symptoms that may indicate an important infectious disease. Any patient exhibiting symptoms of EVD who has traveled within the last 21 days to a region with known cases should be handled as a potential case.

Frontline and assessment hospitals

Acute healthcare hospitals may serve 1 of 3 roles, as a frontline hospital (Tier I), Ebola assessment hospital (Tier II), or Ebola treatment center (Tier III) (Figure 3). Representatives from DHHS, LHDs, and healthcare facilities throughout Utah have developed an operations plan to guide a coordinated, networked approach to the evaluation, care, and testing of suspect EVD patients, including specific plans for the transfer and treatment of patients with confirmed EVD. In Utah, the University of Utah Hospital, the Intermountain Medical Center, and Primary Children's Hospital all serve as Ebola assessment hospitals. All other acute care hospitals serve as frontline hospitals.

Currently, Utah does not have any designated Ebola treatment centers (ETC). The Denver Health Medical Center, in Denver, Colorado, and Children's Hospital, in Aurora, Colorado, are the designated Ebola treatment centers for EVD patients for Region VIII. Any patients identified with Ebola in Utah will be transferred to 1 of these facilities for long-term treatment. Patient transfers to these RETCs will be coordinated through the DHHS and federal partners.

Figure 3: Three-tiered approach for hospital preparedness to manage EVD



As recommended by CDC's [interim U.S. guidance for monitoring and movement of people with potential Ebola virus exposure, people](#) in the state of Utah with a recognized potential exposure to EVD are actively monitored for 21 days after the exposure by local health departments (LHDs) or DHHS. The health department will direct persons under active monitoring (PAMs) who become ill to an appropriate healthcare facility for further evaluation and treatment. Suspected EVD patients may be temporarily referred to a frontline hospital when it is not feasible to refer these persons to an Ebola assessment hospital due to distance, bed availability, or other considerations. Also, patients with unrecognized EVD may present to frontline hospitals without prior notification from health departments. Therefore, frontline hospitals in Utah should:

1. Be prepared to initiate appropriate infection control measures
2. Identify patients with potential EVD exposure risks and signs and symptoms of EVD
3. Isolate suspect patients
4. Inform others, including public health authorities for further specific direction to safely meet the patient's healthcare needs
5. Frontline hospitals may provide 12-24 hours of patient care until patient transport to an EVD assessment hospital can occur.

More information is found in the linked poster: [Identify, Isolate, Inform](#)

This guidance has been written in direct response to funding provided by CDC, and is structured upon preparations and expectations of frontline hospitals to appropriately respond to possible and confirmed EVD cases in the state of Utah. This guidance is a working document and will be updated as further recommendations become available. Updated guidance documents can be found at: [DHHS EBOLA](#)

Pre-hospital transport plans, (EMS) and emergency department (ED) preparedness

EMS and ED coordination

- Establish coordinated plans and procedures in advance especially with regard to their emergency medical services providers (EMS) and emergency departments (ED).
- Designate healthcare personnel (HCP) to meet the EMS provider transporting an EVD PUI on arrival to the hospital.
- Train ED HCP in questioning EMS providers about possible risk factors for EVD in a patient being transported via ambulance to the hospital.
- Assume care of the patient and assist EMS personnel with doffing PPE, if needed.
- Designate an area where EMS personnel can doff their personal protective equipment (PPE) and an area where EMS personnel can park their ambulance to perform decontamination. These designated areas as well as desired entry point(s) for EMS should be identified and communicated with frontline hospital EMS providers. Designated ED entry points should also be secured and free of any other patient or personnel traffic during patient entry and transport.

Identifying suspect Ebola patient

EVD PUIs should be identified before they enter the frontline hospital. Initiation of appropriate EMS and ED coordination will facilitate EVD patient identification. Protocols should be in place to immediately identify patients who report a relevant exposure history, and signs or symptoms consistent with EVD. A simple algorithm prepared by the CDC to assess patient risk can be found [here](#). All ED personnel, including appropriate non-clinical staff, should be trained on how to use this algorithm to assess patient risk for Ebola.

Staffing and training of patient care team

Frontline hospitals should develop staffing readiness plans which include input from a multidisciplinary team of all potentially affected hospital departments (including clinical and nonclinical staff). The staffing plan should be developed and scheduled to support 12-24 consecutive hours of clinical care for EVD PUI

until transport to an Ebola assessment hospital occurs. Plans should minimize the number of personnel in the patient room. Healthcare personnel identified as potential caregivers to an EVD PUI should receive job-specific training according to their roles and have demonstrated proficiency in infection control practices, policies, and procedures for caring for an EVD PUI. Competency must include donning and doffing of PPE, proper waste management, infection control practices, and specimen transport. Retraining should be provided as needed to address observed compliance gaps. Frontline hospitals should also designate individuals as site managers who are responsible for overseeing the implementation of precautions for HCP and patient safety while providing care for an EVD PUI.

Patient isolation guidance

- Identify a private room with a private bathroom (or covered bedside commode) in their ED to accommodate an EVD PUI. The EVD PUI patient room needs to be physically separated from other patient care areas. Ideally, the room will be sealed or closed off to personnel who are not engaged as part of the EVD patient management team. Consider patient isolation in an airborne infection isolation room (AIIR) if aerosol generating procedures (AGPs) are anticipated.
- Avoid contamination of medical supplies and reusable porous surfaces that cannot be made single use.
- More information on isolation can be found at [CDC.Gov](https://www.cdc.gov)

Patient transportation

Patient transfer from point of entry to designated patient room in emergency department

Frontline hospitals should pre-identify a route that is secured and free of any other patient or personnel traffic during patient transport to a pre-identified room in the hospital's emergency department. Healthcare personnel who assist with patient transfer need to wear appropriate PPE.

Protocols should be in place for the patient to be transported in appropriate protective equipment to prevent leakage or spills of body fluids, if needed. In addition, protocols should include management of blood or body fluid spills during transport. Cleaning and disinfection of reusable transportation equipment and potentially contaminated areas of the transportation route need to be included in the hospital protocols.

For more guidance, see [CDC SOP'S](#)

Patient transfer from frontline hospital to an Ebola assessment hospital

Plans for transport of an EVD PUI from a frontline hospital to an Ebola assessment hospital have been documented in the following plans. [Ebola Conops](#), [EMS quick reference guide](#),

[Travel screening tool for EVD](#)

The on-call EPI number should be contacted **1-888-374-8824** to coordinate transfer of the patient to an Ebola assessment hospital as recommended in guidance from the Utah Department of Health and Human Services.

PPE: procedures for donning and doffing

Personal protective equipment (PPE): PPE is a critical role in an EVD response for any employee who has the potential for exposure to blood or bodily fluids from an EVD infected patient. Protocols have been established at the hospital level as well as support functions from the tribes, LHDs, and DHHS. Recommended PPE varies based on symptoms. Guidelines for PUIs who are clinically stable and have no bleeding, vomiting, or diarrhea can be found [here](#). If any of these conditions are present, use [these guidelines](#).

Monitoring healthcare personnel and exposures

- Frontline hospitals must document contact information in an exposure log of all persons, including EMS providers, hospital HCP, environmental services staff, family members, and any other persons who had direct contact with the EVD PUI or contact with any potentially infectious materials from the EVD PUI in the ambulance, admitting area, ED, triage area, isolation room, and other areas.
- The exposure log needs to include complete information for how to contact the person and enough information about their exposure to assign risk categories (high-risk, some risk, low-risk) for health department staff to assist the frontline hospital with movement and monitoring guidance for exposed persons.
- More information about HCP monitoring can be found [here](#). Information about quarantine guidance can be found [here](#)
- Frontline hospitals need work-exclusion policies that encourage prompt HCP reporting of illnesses to their supervisor and the hospital's occupational health program without associated penalties of lost wages, benefits, or job status.
- Frontline hospitals should have protocols for monitoring and patient care restrictions of asymptomatic HCP with a high-risk exposure to EVD. High-risk exposures to EVD includes those who:
 - Had direct contact with the EVD PUI
 - Had contact with any blood or body fluids of a confirmed EVD case or EVD PUI
 - Provided healthcare to a confirmed EVD case or EVD PUI without the use of recommended PPE (sufficient to prevent skin or mucous membrane exposure to

- blood or body fluids) or experienced a breach in infection control precautions that results in contact with blood or bodily fluid of a patient with EVD
- Had direct contact with or experience a breach in infection control precautions while handling a human remains of a confirmed EVD case or EVD PUI
- Live in the same household as a person with a confirmed EVD case or EVD PUI. The LHD and DHHS will assist frontline hospitals to monitor exposed persons.
- Monitoring of HCP should occur while care is given to the suspect Ebola patient, and 21 days after the last contact with the suspect Ebola patient or contact with any potentially infectious materials from the EVD PUI.

Laboratory safety

Ebola testing for EVD PUI in Utah will only be done at one of Utah's 3 Ebola assessment hospitals. Frontline hospitals will not perform Ebola testing due to the complexity and infectious nature of the collection and testing process.

Blood collection procedures for laboratory testing from suspect EVD patients, venipuncture, are associated with high exposure risk. Blood collection should be avoided. However, if laboratory testing is required for patient stabilization needs, frontline hospital lab personnel should be trained and demonstrate proficiency in handling specimens safely including appropriate PPE use, sample collection, transport, and waste management. If possible, testing should be delayed until the patient arrives at an Ebola assessment hospital. Any remaining laboratory samples collected at the frontline hospital should accompany the patient to the Ebola assessment hospital for any potential further testing needs.

Frontline hospitals should perform a risk assessment to identify potential exposure risks and should implement engineering controls, administrative, work practice controls, and use of appropriate PPE to mitigate these risks. The risk assessment should consider the path of samples from suspect Ebola patients throughout the laboratory and all work processes, procedures, and tasks performed. When point of care (POC) instruments are used, these instruments should be placed within an enclosure or behind a barrier to contain any splashes or potential aerosols that may be generated. When samples need to be transported to the lab from the ED, specimens should be placed in a durable, leak-proof secondary container. The outside of the container needs to be disinfected with EPA-registered disinfectant with a label claim against non-enveloped viruses prior to removal from the patient's isolation room in the ED. Pneumatic tube systems should not be used to transfer any lab specimens from suspect Ebola patients. The frontline hospital should have a tracking system for specimens that are transported to the lab. The lab needs to safely and securely provide short-term storage of collected specimens. Collected specimens may need to accompany the suspected Ebola patient to an Ebola assessment facility, as guided by health department authorities, or discarded with other medical waste as described in the Management of waste section of this document.

Further guidance about cleaning and disinfection of laboratory surfaces, including management of blood and other body fluid spills, can be found in the Environmental infection control and equipment reprocessing section of this document. See [CDC Guidance](#) for more information

Environmental infection control and equipment reprocessing

Disinfection

- Environmental services staff should wear recommended [personal protective equipment \(PPE\)](#) to protect against direct skin and mucous membrane exposure of cleaning chemicals, contamination, and splashes or spatters during environmental cleaning and disinfection activities.
- Use an EPA-registered hospital disinfectant from [List L](#) or [List Q](#) to disinfect environmental surfaces in rooms of PUIs or patients with confirmed EVD.
- The PPE doffing area should be routinely cleaned and disinfected at least once per day and after the doffing of grossly contaminated PPE.
- Dispose all linens, nonfluid-impermeable pillows or mattresses, and textile privacy curtains into the waste stream to reduce staff exposure to contaminated cloth products.
- All cleaning and disinfection products, including disposable wipes, should be used in accordance with manufacturer's instructions (dilution, storage, shelf life, contact time). Materials used to clean and disinfect environmental surfaces and/or reusable medical equipment used for suspect Ebola patients should be disposable, and discarded after single use.

Training on disinfection

Frontline hospitals need to designate and train HCPs to perform routine cleaning and disinfection of surfaces in the suspect Ebola patient's room while the room is occupied by the patient. Protocols need to be in place for HCP training regarding appropriate PPE to be worn during cleaning and disinfection activities.

Disposable or dedicated equipment

Disposable or dedicated, reusable patient care equipment should be used for EVD PUI. The frontline hospital should have protocols clearly delineating HCP responsibility for cleaning and disinfection of reusable patient care equipment, specifically how reusable equipment should be cleaned and by whom. HCPs should be trained to handle soiled textiles and linens with minimum agitation to avoid contamination of surfaces and persons. Frontline hospitals should immediately remove bulk spill matter, clean and decontaminate spills of blood or other body fluids using EPA-registered disinfectant with label claim against non-enveloped viruses. The frontline hospital should maintain a log

documenting cleaning and disinfection activities associated with the suspect Ebola patient, specifying what, who, when, and how cleaning and disinfection occurred. Frontline hospitals should regularly monitor cleaning and disinfection procedures to make sure there is consistent and adequate cleaning and disinfection of environmental surfaces and medical equipment.

Post-discharge cleaning and disinfection

Frontline hospitals should have protocols for post-discharge cleaning and disinfection upon patient discharge or transfer to an Ebola assessment hospital. All reusable medical equipment, frequently touched surfaces, visibly soiled areas, and floors, in addition to all other surfaces, need to be cleaned and disinfected. All medical waste from the EVD PUI should be sequestered as [Category A](#) waste until the patient's Ebola test result is known. This waste includes all linens, food trays, dishes, cutlery, and left over food. Further guidance regarding waste can be found in the waste management section of this document and at [CDC's waste management guideline](#).

Waste management coordination

This section is intended to provide key information about procedures and regulations regarding waste associated with PUIs or patients with confirmed Ebola.

Waste contaminated or suspect contaminants with Ebola virus is a Category A infectious substance regulated as a hazardous material under the U.S. Department of Transportation (DOT) [Hazardous materials regulations](#) (HMR; 49 CFR, Parts 171-180). Hospitals, EMS, and other healthcare personnel must safely handle, transport, and dispose of waste generated during the care of suspected Ebola patients.

Ebola-associated waste that has been appropriately incinerated, autoclaved, or otherwise inactivated is not infectious, does not pose a health risk, and is not considered to be regulated medical waste or a hazardous material under federal law. Therefore, such waste no longer is considered a Category A infectious substance and is not subject to the requirements of the HMR. Ebola-associated waste may be incinerated and the products of incineration (the ash) can be transported and disposed of in accordance with state and local regulations and standard protocols for hospital waste disposal.

Waste generated during ground transport will be managed per the following:

- Medical waste must be sequestered until the patient's Ebola test result is known. Until that confirmation is complete, all medical waste should be sequestered as Category A waste and held in the patient care area in containers (such as cardboard boxes). The waste should be securely kept in the area clearly labeled as a Category A DOT waste area.
- If Ebola test results are negative, waste may be disposed of following the facility's standard operating procedure for waste removal. If Ebola test results are positive, waste must be handled according to the [CDC's procedures of safe handling and management of Ebola-associated waste](#).

- EMS units will doff PPE and the waste will be disposed of at the final destination per the assessment hospital's Waste management plan.
- Safe containment and packaging of waste should be performed as close as possible to the point of generation.
- Limit the number of personnel who handle generated waste before and after primary containment.
- Always use appropriate PPE and procedures for handling waste until transport away from the hospital for offsite inactivation.
- Place soft waste or sealed sharps containers into a primary medical waste bag (min 1.25 or 1.5 ml – ASTM tested).
- Apply bleach or other disinfectant into the primary bag to sufficiently cover the surface of contaminated materials within the bag and tie it securely.
- Treat the exterior surface of the primary container with bleach or other disinfectant.
- Place the primary bag into a secondary bag and securely tie the outer bag.
- Treat the exterior of the surface of the secondary bag with bleach or other disinfectant.
- Until placed in a Category A DOT waste drum the double-bagged waste should be placed on a hard non-porous surface in a secure room in close proximity to point of use. The collection area must be clearly labeled as Category A DOT waste.

Disposal contracts

Disposal contracts have been preliminarily approved and will be created at the time of need to arrange for disposal of special Category A DOT waste drum(s). All transportation contracts will be coordinated through the appropriate channels of the Utah Department of Transportation. (Figure 4)

Figure 4

Companies in Utah that have agreed to participate in Ebola waste disposal upon request	
Services: Healthcare facility container delivery, transport and disposal	Services: Decontamination of contaminated areas, and arrange for transport and disposal
Veolia Environmental Services 24 hour service: 800-688-4005	EnviroCare 24 hour service: 866-230-8485

Mortuary affairs

In the event that a patient dies in transport, this section of the plan is intended to assist EMS providers in protecting against the postmortem spread of Ebola infection. Reroute transport to the mortuary for final disposition of patient remains.

Although Ebola-related deaths in the US would likely occur within a hospital setting, death during transport of an Ebola patient is a possibility. Ebola can be transmitted in postmortem care settings through direct handling of human remains without recommended PPE. See [CDC guidance for the handling of Ebola remains.](#)

Assumptions

- Utah plans to manage fatalities of Ebola patients if needed in accordance with CDC recommendations.
- Assessment hospitals in Utah have a facility-specific plan to manage fatalities.
- The Utah Department of Health and Human Services Office of the Medical Examiner (OME) will not handle any confirmed Ebola infected deceased bodies unless death circumstances warrant investigation.

Patient death during transport: If a patient dies in transit, decisions as to where the remains will be transported will be handled on a case-by-case basis by medical control depending on transport time to facility, provider time in PPE, and/or geographical location.

Available fatality management capabilities: Utah currently has a limited capability to assist with processing the remains of Ebola decedents in the HHS Region VIII states if requested. This capability includes staff, equipment, and commodities that would be necessary to support the safe processing of human remains.

Communications

Frontline hospitals need to develop a communications plan to inform and educate healthcare personnel and patients about how care is provided for an EVD suspect patient. This communication plan, along with procedures and protocols, needs to be updated and disseminated to appropriate groups, including EMS providers and ED healthcare personnel. The hospital's communication plan should include a process to coordinate and disseminate information with public information officers (PIOs) of LHDs, DHHS, CDC, media, and family members with a single staff member from the hospital designated as a primary point of contact. The frontline hospital should develop a plan to maintain communication between the suspect EVD patient and his/her family. An area for the family should be identified within the frontline hospital, away from the suspect Ebola patient's room.

While disclosure of health information about suspect EVD patients entering frontline hospitals is critical to effectively contain the disease, DHHS and LHDs will assure the confidentiality and integrity of this protected information by adhering to established agency policies. HIPAA provides protections for individually identifiable health information, and gives patients a number of rights with respect to that information. HIPAA specifies a series of administrative, physical, and technical safeguards, which DHHS has in place and follows

Access and functional needs populations

At-risk populations

Individuals who have access and functional needs have additional needs that must be considered in frontline hospitals plans. Plans should include emergent patient care needs of a suspected Ebola patient that cannot be delayed prior to transfer to an Ebola assessment hospital, such as labor and delivery or acute dialysis needs. These needs can be grouped into 5 categories referred to as C-MIST:

1. **C**ommunication—limited English proficiency, sign language, braille, or aids to communicate, limited ability to hear announcements, see signs, or verbalize concerns.
2. **M**aintaining health—may require medications, supplies, services, equipment, infant/child care, or specific nutrition.
3. **I**ndependence—access to necessary mobility devices, assistive technology, vision and communication aids, service animals.
4. **S**upport—caregiver assistance, memory or understanding, adaptation to new environments, trauma or abuse.
5. **T**ransportation—access to transportation, inability or restrictions for driving.

Appendix

Appendix A

[DHHS travel screening tool](#)

Appendix B

Utah local health departments and Utah Department of Health and Human Services 24/7 contact numbers

Bear River Health Department	1. 435-716-8771—All hours 2. 877-229-8825—All hours
Central Utah Public Health Department	1. 435-896-5451—Main office 2. 888-374-8824—After hours epi
Davis County Health Department	1. 801-525-5220—All hours 2. 801-807-9418—After hours
Salt Lake County Health Department	1. 385-468-8888—After hours 2. 385-468-4100—Working hours
San Juan County Public Health	1. 435-979-7898—All hours 2. 435-587-3838—After hours epi
Southeastern Utah District Health Department	1. 435-630-1179—All hours 2. 435-637-3671—Office hours
Southwest Utah Public Health Department	1. 435-673-3528—All hours
Summit County Health Department	1. 435-333-1500—Main office 2. 888-374-8824—After hours epi
Tooele County Health Department	1. 435-277-2300—All hours
TriCounty Health Department	1. 435-650-7338—All hours 2. 435-247-1177—Office hours
Utah County Health Department	1. 801-794-3970—All hours
Wasatch County Health Department	1. 435-657-3333—All hours
Weber/Morgan Health Department	1. 801-710-6636—After hours 2. 801-399-72155—Office hours

Appendix C

Assessment Tool for Ebola frontline hospitals in the state of Utah

Hospital capability domain	Elements required for minimum capability	Minimum capability in place? (Y/N)	
Pre-hospital transport plans, emergency medical services (EMS), triage	<u>EMS providers have protocols for:</u> <ul style="list-style-type: none"> ● Screening patient for Ebola by asking about relevant travel history and EVD signs and symptoms ● Safe transport of PUI or suspect Ebola patient, including PPE used by EMS personnel ● Training of EMS providers in correct use of PPE and documentation of competency ● Advance notification of the hospital and public health authorities ● Cleaning and disinfection of the ambulance and potentially contaminated equipment ● Disposal of used PPE and waste generated during transport. ● Hospital has designated: <ul style="list-style-type: none"> ○ Hospital personnel to meet the EMS provider on arrival to the hospital assume care of the patient and assist EMS personnel with doffing PPE if needed ○ Area where EMS personnel can doff their PPE ○ Area where EMS personnel can park their ambulance to perform decontamination ○ Secured entry point for EMS that is secure and free of any other patient or personnel traffic during patient entry and transport 	Y	N
Hospital infrastructure: patient room(s)	<u>Hospital has:</u> <ul style="list-style-type: none"> ● Private negative pressure room with in-room dedicated bathroom with covered toilet or covered bedside commode ● Dedicated patient-care equipment ● Separate areas/rooms immediately adjacent to patient room for: <ul style="list-style-type: none"> ○ Donning PPE ○ Doffing PPE 	Y	N
		Y	N
		Y	N
		Y	N

Hospital capability domain	Elements required for minimum capability	Minimum capability in place? (Y/N)	
Patient transportation	<u>Inter-hospital</u> <ul style="list-style-type: none"> Plans are in place that have been jointly determined by the state and local public health agency, emergency medical services, and hospital for inter-hospital transfer/transport of PUIs for EVD to an Ebola assessment hospital 	Y	N
	<u>Plans include:</u> <ul style="list-style-type: none"> Ground transport Air transport (the specimen transport needs to be DOT certified) Identification of transportation provider(s) with appropriate training to safely transport a patient Identification of transportation provider(s) with appropriate PPE to safely transport a patient 	Y	N
		Y	N
		Y	N
Laboratory	<u>Diagnostic laboratory procedures and protocols are in place for:</u>	Y	N
	<ul style="list-style-type: none"> Minimal level of diagnostic testing capability* 	Y	N
	<ul style="list-style-type: none"> Equipment and supply selection 	Y	N
	<ul style="list-style-type: none"> Disinfection 	Y	N
	<ul style="list-style-type: none"> Staffing 	Y	N
	<ul style="list-style-type: none"> Specimen handoff and transport for routine clinical diagnostic testing at the hospital 	Y	N
<u>Lab personnel have been trained and have demonstrated proficiency in:</u>			
<ul style="list-style-type: none"> Donning and doffing of PPE 	Y	N	
<ul style="list-style-type: none"> Waste management 	Y	N	
<ul style="list-style-type: none"> Processing specimens while in PPE 	Y	N	
<ul style="list-style-type: none"> Specimen transport 	Y	N	
	*Testing capability should include CBC, glucose, potassium, malaria exam, influenza test, liver function tests. <i>Frontline hospitals will not perform Ebola testing.</i>		

Hospital capability domain	Elements required for minimum capability	Minimum capability in place? (Y/N)	
Staffing	<ul style="list-style-type: none"> Readiness plans include input from a multidisciplinary team of emergency department (including clinical and nonclinical staff) 	Y	N
	<ul style="list-style-type: none"> Staffing plans have been developed and scheduled to support 12-24 consecutive hours of clinical care; sufficient physician and nursing staff are available to handle the patient's care needs 	Y	N
	<ul style="list-style-type: none"> Frontline hospital has a process for continuous staff input from those who may or may not be directly involved in Ebola patient care and for addressing employee safety questions and concerns 	Y	N
	<ul style="list-style-type: none"> The overall safe care of Ebola patients in a frontline healthcare facility is overseen by an onsite manager at all times 	Y	N
Training	All staff involved in or supporting patient care are appropriately trained for their roles	Y	N
	All staff involved in or supporting patient care and according to their roles have demonstrated proficiency in:	Y	N
	<ul style="list-style-type: none"> Donning and doffing of PPE 	Y	N
	<ul style="list-style-type: none"> Proper waste management 	Y	N
	<ul style="list-style-type: none"> Infection control practices 	Y	N
<ul style="list-style-type: none"> Specimen transport 	Y	N	
Retraining is provided as needed and to address observed gaps	Y	N	

Hospital capability domain	Elements required for minimum capability	Minimum capability in place? (Y/N)	
PPE	<ul style="list-style-type: none"> Hospital has selected appropriate PPE for PUIs or confirmed EVD patients who are clinically stable and do not have vomiting, diarrhea, or bleeding, or a clinical condition that warrants invasive or aerosol-generating procedures (intubation, suctioning, active resuscitation). The minimum PPE requirements for this scenario are outlined in the following guidelines Each step of every PPE donning/doffing procedure is supervised by a trained observer to ensure proper completion of established PPE protocols Hospital has at least 12-24 hours supply of PPE in stock 	Y	N
Aerosol generating procedures (AGP)	<ul style="list-style-type: none"> Hospital has a plan for performing AGPs on confirmed or suspect EVD patients Hospital has an airborne infection isolation room (AIIR), negative pressure room, or equivalent available to perform AGP, if indicated HCP performing or assisting with AGPs are trained to don and doff airborne transmission PPE Staff who perform the AGP are trained to conduct environmental cleaning directly after the procedure 	Y	N
Waste management	<ul style="list-style-type: none"> Hospital will sequester medical waste until the patient's Ebola test result becomes known; if the patient is confirmed to have EVD, arrangements can be made with a vendor capable of managing the waste as a Category A infectious substance Hospital has appropriate containers for the safe temporary storage of Category A infectious waste Staff who handle waste are trained in the correct use of PPE and the proper handling and storage of Category A infectious substances at the hospital 	Y	N

Hospital capability domain	Elements required for minimum capability	Minimum capability in place? (Y/N)	
Worker safety	<ul style="list-style-type: none"> Worker safety programs and policies are in place Hospital is in compliance with all federal or state occupational safety and health regulations applicable to reducing employee exposure to the Ebola virus Hospital has a program for assuring direct active monitoring of all healthcare workers involved in direct patient care to assure monitoring for 21 days since the last known exposure This monitoring will be done in coordination with local and state public health agencies 	Y	N
Environmental services	<p>Hospital has a program in place to clean and disinfect patient care areas and equipment, including use of an Environmental Protection Agency-registered hospital disinfectant with a label claim of potency at least equivalent to that for a non- enveloped virus (norovirus, rotavirus, adenovirus, and poliovirus)</p> <p>Designated staff are:</p> <ul style="list-style-type: none"> Trained in correct cleaning and disinfection of the patient room and equipment Trained in the correct use of PPE Directly supervised during all cleaning and disinfection <p>Workers engaged in environmental cleaning and disinfection of patient care areas and equipment follow safe practices including appropriate PPE</p>	Y	N
Communications	<p>To ensure coordination of the response and communication regarding any PUIs for Ebola, the hospital has:</p> <ul style="list-style-type: none"> An emergency management structure Plans and processes to routinely communicate with local and state public health agencies, emergency management authorities, and its healthcare coalition (if appropriate) <p>Plans and processes to routinely communicate with hospital employees, patients, and community leadership</p>	Y	N
		Y	N

Attachment D

CDC infection prevention and control assessment tool for acute care hospitals

([Version 1.3.2](#)) This tool is intended to assist in the assessment of infection control programs and practices in acute care hospitals. If feasible, direct observations of infection control practices are encouraged. To facilitate the assessment, health departments are encouraged to share this tool with hospitals in advance of their visit.

Acronyms

CDC	Centers for Disease Control and Prevention
DOT	Department of Transportation
ED	Emergency department
EMS	Emergency medical services
EVD	Ebola virus disease
HCP	Healthcare personnel
HIPAA	Health Insurance Portability and Accountability Act
LHD	Local health department
PAM	Person under active monitoring
PIO	Public information officer
POC	Point of care
PPE	Personal protective equipment
PUI	Person under investigation
DHHS	Utah Department of Health and Human Services