

## Purpose

This tool is intended to guide frontline healthcare facilities in a review of their immediate care capabilities for patients suspected or confirmed to have a viral hemorrhagic fever (VHF) and to identify preparedness gaps for resolution. The Tennessee Department of Health (TDH) adapted this tool using resources from the National Emerging Special Pathogens Training and Education Center (NETEC).

## Background

On September 20, 2022, the Uganda Ministry of Health and the World Health Organization confirmed a new outbreak of Ebola virus disease (EVD) in the Mubende district of Uganda in West Africa. The U.S. Centers for Disease Control and Prevention issued a health advisory on October 6, 2022, urging U.S. health care providers to be alert and prepared to evaluate patients suspected of having EVD, particularly among people who have recently traveled to affected areas in Uganda. All health care facilities are part of the frontline defense against the spread of disease, as patients will seek care in emergency departments, urgent care centers and clinics. Health care facility preparedness to care for patients with a viral hemorrhagic fever (VHF) is essential to prevent transmission to staff, other patients and our communities.

## Identify

Identify is the first step of the Identify, Isolate, and Inform framework for health care facilities to quickly recognize and safely manage patients who have the potential to spread disease. Screening all patients upon entry to a facility for signs, symptoms, and epidemiological risk factors for VHF will facilitate early identification of a patient at risk for having the disease.

### Identify Readiness Items

#	Item	Status Yes or No
1.	Screening for symptoms and travel history occurs at all points of entry to the facility including those arriving by EMS.	Yes <input type="checkbox"/> No <input type="checkbox"/>
2.	Signage is present at all points of entry into the health system to enable patients to self-identify travel history and any symptoms consistent with a VHF.	Yes <input type="checkbox"/> No <input type="checkbox"/>
3.	Staff have received training on the identify process including VHF signs and symptoms with travel history.	Yes <input type="checkbox"/> No <input type="checkbox"/>

## Isolate

Isolate is the second step of the Identify, Isolate, and Inform framework for health care facilities to quickly recognize and safely manage patients who have the potential to spread disease. Rapid isolation allows infection prevention and control measures to be implemented to reduce exposure to staff, visitors, and other patients.

### Isolate Readiness Items

#	Item	Status Yes or No
1.	<b>Masks are available at all points of entry for patients entering the facility.</b>	Yes <input type="checkbox"/> No <input type="checkbox"/>
2.	<b>An isolation space has been identified and:</b>	Yes <input type="checkbox"/> No <input type="checkbox"/>
2a.	Staff are oriented to its location.	Yes <input type="checkbox"/> No <input type="checkbox"/>
2b.	The process for using the space has been developed and tested (e.g., moving out other patients or extra equipment, initiating negative pressure, if available).	Yes <input type="checkbox"/> No <input type="checkbox"/>
2c.	A checklist has been developed to direct the preparation of the isolation space.	Yes <input type="checkbox"/> No <input type="checkbox"/>
2d.	There is a private restroom or bedside commode with lid/cover available.	Yes <input type="checkbox"/> No <input type="checkbox"/>
2e.	The isolation space is an AIIR, or a portable negative pressure unit is available if needed. If an AIIR is unavailable, a single patient room has been identified for use.	Yes <input type="checkbox"/> No <input type="checkbox"/>
2f.	There is a process for communication to occur into and out of the room (Ex. dedicated phone, etc.).	Yes <input type="checkbox"/> No <input type="checkbox"/>
2g.	There is a process to document which staff enter the isolation space.	Yes <input type="checkbox"/> No <input type="checkbox"/>
3.	<b>There is a plan for the internal transfer of a patient from the point of entry or triage area (if identified after intake) to the isolation space. The plan includes the following:</b>	Yes <input type="checkbox"/> No <input type="checkbox"/>
3a.	Ability to minimize personnel along the route to the isolation space.	Yes <input type="checkbox"/> No <input type="checkbox"/>
3b.	Preparing the isolation space for the patient arrival.	Yes <input type="checkbox"/> No <input type="checkbox"/>
3c.	Personnel who have been trained on the process.	Yes <input type="checkbox"/> No <input type="checkbox"/>
4.	<b>Staff who will work in the isolation area have been trained on special pathogen workflows and processes.</b>	Yes <input type="checkbox"/> No <input type="checkbox"/>

## Inform

Inform is the third step of the Identify, Isolate, and Inform framework for health care facilities to quickly recognize and safely manage patients who have the potential to spread disease. The Inform process ensures efficient communication processes are in place to alert internal and external stakeholders to the presence of a person under investigation (PUI) for VHF.

### Inform Readiness Items

#	Item	Status Yes or No
1.	Key personnel internal to your facility (e.g., Infection preventionists, health care administrator, etc.) who will provide support and/or be involved in the care of a PUI have been identified.	Yes <input type="checkbox"/> No <input type="checkbox"/>
2.	Key partners both internal and external to your facility, such as county health department and Tennessee Department of Health, have been identified and staff know who to inform. Contact TDH 24/7 at 615-741-7247.	Yes <input type="checkbox"/> No <input type="checkbox"/>
3.	Contact information for internal and external key personnel is available in triage/internal protocols or is readily accessible.	Yes <input type="checkbox"/> No <input type="checkbox"/>
4.	Staff who will inform key personnel are knowledgeable on the process, including what information to provide.	Yes <input type="checkbox"/> No <input type="checkbox"/>

## Personal Protective Equipment (PPE)

PPE ensembles worn during the care of patients suspected or confirmed to have a VHF must provide enhanced contact and droplet protection, should consider the condition of the patient, and the risk of exposure to blood and other potentially infectious materials posed by care tasks. Complex PPE ensembles require additional training to ensure staff safety and may require additional personnel to assist in doffing. The use of a trained observer is also recommended to ensure correct donning and safe doffing.

### PPE Readiness Items

#	Item	Status Yes or No
1.	Necessary PPE has been selected based on pathogen transmission and patient condition, e.g., wet vs. dry (See TDH PPE reference guide).	Yes <input type="checkbox"/> No <input type="checkbox"/>
2.	Staff have received training on VHF PPE donning and doffing protocols.	Yes <input type="checkbox"/> No <input type="checkbox"/>
3.	There is a dedicated clean space to don PPE and a separate safe space to doff PPE.	Yes <input type="checkbox"/> No <input type="checkbox"/>
4.	There is an adequate amount of appropriate PPE available to provide care for at least 1 patient for up to 48 hours. See DASH tool <a href="#">HERE</a> for guidance on determining facility PPE supply needs.	Yes <input type="checkbox"/> No <input type="checkbox"/>
5.	A trained observer is utilized to monitor activities in the isolation room and donning and doffing of PPE.	Yes <input type="checkbox"/> No <input type="checkbox"/>

## Treatment and Care

The goal of caring for patients suspected or confirmed to have a VHF is to provide safe, effective, high-quality patient care while maintaining the safety of all personnel.

### Treatment and Care Readiness Items

#	Item	Status Yes or No
1.	Reference guides and resources are readily available for staff in the event a PUI arrives at the facility.	Yes <input type="checkbox"/> No <input type="checkbox"/>
2.	The care interventions that can be safely provided for patients suspected or confirmed to have VHF have been discussed and clinicians are aware of how to safely offer care (e.g., diagnostic imaging, invasive procedures, specimen collection).	Yes <input type="checkbox"/> No <input type="checkbox"/>
3.	There is a plan to collaborate with public health to monitor personnel involved in the care of a patient with a confirmed diagnosis. TDH will provide consultation prior to collection or submission of samples.	Yes <input type="checkbox"/> No <input type="checkbox"/>
4.	Diagnostic testing for VHF pathogen will be done in coordination with the public health department.	Yes <input type="checkbox"/> No <input type="checkbox"/>
5.	If routine laboratory testing is required, dedicated point of care devices will be used.	Yes <input type="checkbox"/> No <input type="checkbox"/>
6.	The facility has access to resources for guidance on packaging and shipment of presumed category A specimens. TDH can provide resources as needed.	Yes <input type="checkbox"/> No <input type="checkbox"/>
7.	The facility is aware of available resources for decedent management and will seek support to conduct the process. TDH can provide resources as needed.	Yes <input type="checkbox"/> No <input type="checkbox"/>

## Waste Management and Cleaning & Disinfection

Waste generated in the care of patients under investigation or patients with confirmed Ebola virus disease (EVD) is subject to procedures set forth by local, state, and federal regulations. Basic principles for spills of blood and other potentially infectious materials are outlined in the U.S. Occupational Safety and Health Administration (OSHA). Waste contaminated (or suspected to be contaminated) with Ebola virus is a Category A infectious substance regulated by the U.S. Department of Transportation Hazardous Materials Regulations (HMR; 49 CFR, Parts 171-180). Requirements in the HMR apply to any material DOT determines is capable of posing an unreasonable risk to health, safety, and property when transported in commerce. The EPA maintains lists of registered disinfectants that should be used to destroy certain pathogens. For a list of disinfectants that are effective against the Ebola virus visit <https://www.epa.gov/pesticide-registration/list-l-disinfectants-use-against-ebola-virus#check>.

## Waste Management and Cleaning & Disinfection Items

#	Item	Status Yes or No
1.	<b>There is a plan for the management of waste generated during the care of a person suspected or confirmed to have a pathogen and it includes the following:</b>	Yes <input type="checkbox"/> No <input type="checkbox"/>
1a.	A secure designated waste holding area.	Yes <input type="checkbox"/> No <input type="checkbox"/>
1b.	Staff training on the waste management process including proper closure of the bags.	Yes <input type="checkbox"/> No <input type="checkbox"/>
1c.	Secure packaging/containment of waste.	Yes <input type="checkbox"/> No <input type="checkbox"/>
1d.	If required, a vendor licensed to transport category A infectious substance will transport the waste for off-site inactivation.	Yes <input type="checkbox"/> No <input type="checkbox"/>
2.	<b>There is an isolation area cleaning and disinfection plan that includes the following:</b>	Yes <input type="checkbox"/> No <input type="checkbox"/>
2a.	Guidance on the type of PPE to be worn when performing cleaning in the special pathogen isolation area.	Yes <input type="checkbox"/> No <input type="checkbox"/>
2b.	A process to ensure an appropriate disinfectant has been selected and is available for use that is effective against the pathogen.	Yes <input type="checkbox"/> No <input type="checkbox"/>

## Transportation

Patients suspected or confirmed to have a VHF may require transportation either to or from your facility. Having a plan in place will facilitate the movement of the patient in a manner that maintains safety for facility and transportation staff.

## Transportation Readiness Items

#	Item	Status Yes or No
1.	Facility staff have contact information for local and state public health to arrange for patient transfer. TDH can be reached 24/7 at 615-741-7247.	Yes <input type="checkbox"/> No <input type="checkbox"/>
2.	Your facility has identified a specific location and established processes for the transfer of patient care between EMS personnel and facility personnel.	Yes <input type="checkbox"/> No <input type="checkbox"/>