

VIRAL HEMORRHAGIC FEVERS (VHF)**IMMEDIATE NOTIFICATION****EPIDEMIOLOGY PROGRAM**

VHF would include Ebola or Marburg Viruses, Old World Arenaviruses (Lassa and Lujo Viruses), New World Arenaviruses (Guanarito, Machupo, Junin, Sabia, and Chapare Viruses), Rift Valley Fever Virus, or Crimean-Congo Hemorrhagic Fever Virus

Event Name:	VHF
Event Time Period:	Lifelong immunity
Clinical Description (CSTE 2024):	<p>Acuet onset of one or more of the following clinical findings:</p> <ul style="list-style-type: none">• Subjective OR measured fever $\geq 38^{\circ}\text{C}/100.4^{\circ}\text{F}$• Headache• Muscle and/or joint pain• Weakness and fatigue• Cough/difficulty breathing• Pharyngitis• Loss of appetite• Chest pain• Skin rash• Red eyes• Abdominal pain• Vomiting• Diarrhea• Intractable hiccups• Encephalitis or other neurological manifestations• Unexplained bleeding or bruising not related to injury or menstruation
Epidemiologic Linkage Criteria (CSTE 2024):	<p>Within the incubation period of the VHF any of the following:</p> <ul style="list-style-type: none">• Contact with a person who had known or suspected VHF or any object contaminated by their body fluids without the use of or confidence in proper adherence to, or experiences a breach in, recommended infection prevention and control (IPC) precautions, including personal protective equipment (PPE) use, OR• Handles specimens that contain or might contain replication competent VHF viruses without use of or confidence in proper adherence to, or experiences a breach in, recommended IPC precautions, including PPE use, OR• Handles bats, rodents, or primates that are or may be infected with a VHF without use of or

	<p>confidence in proper adherence to, or experiences a breach in, recommended IPC precautions, including PPE use, OR</p> <ul style="list-style-type: none"> • Exposure to body fluids (i.e., urine, saliva, sweat, vomit, breast milk, amniotic fluid, semen, aqueous humor, or cerebral spinal fluid) from a person who clinically recovered from a VHF without use of or confidence in proper adherence to, or experiences a breach in, recommended IPC precautions, including PPE use, OR • Residence in or travel to a VHF endemic area or area with active transmission AND an experience with any of the following scenarios for potentially unrecognized VHF exposures: <ul style="list-style-type: none"> ○ Contact with someone who was sick or died; ○ Visiting or work in a healthcare facility; ○ Breach in PPE and/or IPC precautions; ○ Visiting a traditional healer; ○ Attend or participate in funerals or burials; ○ Contact with animals; ○ Consumption of or handling raw meat; ○ Tick or mosquito bite; ○ Spent time in a mine or cave; ○ Any other scenario for previously unrecognized VHF exposure as determined in consultation with subject matter experts at CDC 	
Vital Record Evidence (CSTE 2024):	A person whose death certificate lists VHF or infection with a VHF-causing virus (Ebola, Lassa, Marburg, Lujo, Guanarito, Machupo, Junin, Sabia, Chapare, Rift Valley fever, or Crimean-Congo hemorrhagic fever viruses) as an underlying cause of death or a significant condition contributing to death.	
CSTE Event Classification (2024):	<i>Confirmed</i>	<p>A case with laboratory confirmation by:</p> <ul style="list-style-type: none"> • Detection of VHF-specific nucleic acid in blood or other body fluids, blood products, or tissues using a diagnostic molecular test (e.g., NAAT, genome sequencing); OR • Detection of VHF-specific IgM by ELISA; OR • Detection of a four-fold rise in VHF-specific IgG titer from an acute sample to a convalescent sample; OR • VHF viral isolation in cell culture for blood, blood products (e.g., serum), or tissues

	<i>Suspect</i>	A clinically compatible case with epidemiologic linkage evidence OR A case with vital record evidence.
Massachusetts Event Classification (2024):		Follows CSTE case definition

VIRAL HEMORRHAGIC FEVERS (continued)

Report Type	Test Type	Source	Result	New event or beyond report period?	Data Entry
Laboratory report	Viral isolation	Clinical specimen	Hendra virus OR Nipah virus OR Ebola virus OR Rift valley fever virus OR Marburg virus OR Crimean Congo virus OR Lassa virus	Yes	New event SUSPECT
				No	Same event
<i>Select:</i>	Virus identified : PrId : Pt : xxx : Nom : Virus culture				
Laboratory report	Serology	Clinical specimen	IgM or IgG positive for Lassa virus	Yes	New event SUSPECT
				No	Same event
<i>Select (IgG specific):</i>	Lassa Virus Ab.IgG:Titr:PT:Ser:Qn:xxx				
<i>Select (IgM specific):</i>	Lassa Virus Ab.IgM:Titr:PT:Ser:Qn:xxx				
Laboratory report	Antigen test	Clinical specimen	Positive for Lassa virus	Yes	New event SUSPECT
				No	Same event
<i>Select:</i>	Lassa Virus Ag:Acnc:PT:Ser:Ord:xxx				
Laboratory report	PCR	Clinical specimen	Ebola virus detected	Yes	New event SUSPECT
				No	Same event
<i>Select:</i>	Ebola Virus RNA:Acnc:PT:xxx:Ord:PCR				
Laboratory report	Titer	Clinical specimen	Positive	Yes	New event SUSPECT
				No	Same event
<i>Select:</i>	Ebola Virus Ab : Titr : PT : Ser : Qn : xxx				
Laboratory report	Antigen test	Clinical specimen	Positive	Yes	New event SUSPECT
				No	Same event
<i>Select:</i>	Ebola Virus Ag : Acnc: PT : xxx: Ord: IF				

VIRAL HEMORRHAGIC FEVERS (continued)

Report Type	Test Type	Source	Result	New event or beyond report period?	Data Entry
Laboratory report	Serology	Clinical specimen	IgM Positive for Rift valley fever virus	Yes	New event SUSPECT
				No	Same event
<i>Select:</i>	Rift Valley Fever Virus Ab:Titr:PT:Ser:Qn:xxx				
Laboratory report	Antigen test	Clinical specimen	Positive	Yes	New event SUSPECT
				No	Same event
<i>Select:</i>	Rift Valley Fever Virus Ag:Acnc:PT:xxx:Ord:xxx				
Laboratory report	PCR	Clinical specimen	Positive	Yes	New event SUSPECT
				No	Same event
<i>Select</i>	Marburg Virus RNA:Acnc:PT:xxx:Ord:PCR				