

Interim Guidance on Risk Assessment and
Management of Person with Potential Ebola Virus
Exposure

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TO:	Health Alert Network
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This transmission is a “Health Advisory,” provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL; **EMS COUNCILS:** PLEASE DISTRIBUTE AS APPROPRIATE; **FQHCs:** PLEASE DISTRIBUTE AS APPROPRIATE **LOCAL HEALTH JURISDICTIONS:** PLEASE DISTRIBUTE AS APPROPRIATE; **PROFESSIONAL ORGANIZATIONS:** PLEASE DISTRIBUTE TO YOUR MEMBERSHIP; **LONG-TERM CARE FACILITIES:** PLEASE SHARE WITH ALL MEDICAL, INFECTION CONTROL, AND NURSING STAFF IN YOUR FACILITY

- An outbreak of Ebola virus disease (EVD) caused by Sudan virus (species *Sudan ebolavirus*) has recently been confirmed in Uganda.
- As of October 6, 2022, **there are no suspected, probable, or confirmed EVD cases related to this outbreak reported in the United States** or other countries outside of Uganda.
- **Healthcare personnel should elicit the patient’s travel history and consider the possibility of Ebola** in patients who present with fever, myalgia, severe headache, abdominal pain, vomiting, diarrhea, and/or unexplained bleeding or bruising. Should the patient report a history of recent travel to the affected outbreak areas and exhibit such symptoms, public health authorities should be contacted immediately to activate the state’s Ebola Response Plan.
- EVD is spread through **direct contact** with bodily fluids of a person who is sick with or has died from EVD, infected animals, or with objects like needles that are contaminated with the virus. EVD is **not** spread through airborne transmission.
- There is currently no FDA-licensed vaccine to protect against Sudan virus infection.
- Without early diagnosis and appropriate supportive care, infection with Sudan virus can result in a high mortality rate.
- If you have questions about this guidance, please call your local health department or 1-877-PA-HEALTH (1-877-724-3258).

On September 20, 2022, the Ministry of Health of Uganda officially declared an outbreak of Ebola virus disease (EVD) due to Sudan virus (species *Sudan ebolavirus*) in the Mubende District, Central Uganda. This is the fifth outbreak of EVD caused by Sudan virus in Uganda since 2000. The current outbreak is in the same area as Uganda's most recent EVD outbreak caused by Sudan virus, which occurred in 2012. During the 2012 outbreak, limited secondary transmission was reported, and the outbreak was effectively contained.

This health advisory aims to summarize CDC's recommendations for U.S. public health departments and clinicians regarding case identification and testing, and clinical laboratory biosafety considerations. As of October 6, 2022, **there are no suspected, probable, or confirmed EVD cases related to this outbreak reported in the United States** or other countries outside of Uganda. However, this communication serves as a precautionary reminder to public health departments, public health laboratories, and healthcare workers about best practices and to raise awareness about this outbreak.

Current Situation

Uganda

- The first confirmed case of EVD was a 25-year-old man who lived in Mubende District and quickly identified as a suspect case of viral hemorrhagic fever (VHF) and isolated in the Mubende Regional Referral Hospital.
- Blood collected from this patient tested positive for Sudan virus by real-time reverse transcription polymerase chain reaction (rRT-PCR) on September 19, 2022, at the Uganda Virus Research Institute (UVRI). The patient died the same day, and a supervised burial was performed by trained staff wearing proper personal protective equipment (PPE).
- Further investigation into this case revealed a cluster of unexplained deaths occurring in the community during the previous month.
- On September 20, 2022, the Ministry of Health of Uganda officially declared an outbreak of Ebola virus disease (EVD) due to Sudan virus (species *Sudan ebolavirus*) in the Mubende District, Central Uganda.
- As of October 6, 2022, a total of 44 confirmed cases, 10 confirmed deaths, and 20 probable deaths of EVD have been identified in Uganda.
- CDC is working with the Ministry of Health of Uganda, World Health Organization, and other partners to support response to this outbreak.
- Additional details can be found on the [CDC](#) and [WHO](#) websites.

International Air Travel

- The geographic scope of this outbreak in Uganda is currently limited to five districts in central Uganda and not the capital Kampala or the travel hub of Entebbe.
- While there are **no direct flights from Uganda to the United States**, travelers from or passing through affected areas in Uganda can enter the United States on flights connecting from other countries.

Risk Assessment

CDC recommends that clinicians obtain a detailed travel history from patients with suspected EVD, especially those that have been in affected areas of Uganda. Early consideration of EVD in the differential diagnosis is important for providing appropriate and prompt patient care, diagnostics, and to prevent the spread of infection. Additional guidance on traveler monitoring is located below.

- Each traveler should have an initial risk assessment for Ebola virus exposure. This assessment should include whether the traveler:
 - Was present in the Ebola outbreak area. Currently, outbreaks have been reported in 5 districts (Mubende, Kyegegwa, Kassanda, Kagadi, Bunyangabu). The outbreak areas may change and careful review of districts posted to [CDC website](#) will be necessary when conducting a risk assessment.
 - Had any epidemiologic risk factors for exposure to Ebola virus or a person with EVD
 - e.g., as a caregiver, healthcare provider, laboratory worker, or burial worker
 - Used [personal protective equipment](#) and other recommended infection control measures during any potential exposure
 - Had any potential high-risk exposures (see [Definitions](#) section)
- Travelers should also be assessed for signs and symptoms of EVD during the initial encounter.

Health Education

Health departments should ensure all travelers from a country with an Ebola outbreak know:

- How to monitor themselves for signs and symptoms of EVD
- To self-isolate immediately if symptoms develop
- How to notify public health officials should symptoms develop

Monitoring and Other Public Health Interventions

At this time, PADOH will be conducting symptom monitoring on a daily/weekly basis depending on risk category for persons with potential Ebola virus exposure by electronic means (e.g., text illness messaging/TIMS) for 21 days for those:

- Who reported high risk exposure
- Present in a designated outbreak area and
- Present in Uganda but not in a designated outbreak area

High-risk Exposures

People with high-risk exposures should be:

- Quarantined
- Monitored daily[#]
- Restricted from traveling by commercial transport

[#]High risk exposures will receive a single phone check-in on days 8-10, in addition to daily TIMS monitoring.

Presence in a Designated Ebola Outbreak Area but no High-risk Exposures

People who have been in a designated Ebola outbreak area within the previous 21 days should be monitored for symptoms at least **twice weekly** until 21 days after they departed Uganda.

Presence in Country with Ebola Outbreak but not in Designated Outbreak Area

People who were present in Uganda but not in a designated outbreak area and who have no other [epidemiologic risk factors](#) should be monitored at least **weekly** until 21 days after they departed Uganda.

Summary of Post-arrival Management Recommendations for Asymptomatic Travelers by Exposure Category

Intervention	Reported High Risk Exposure	Present in Designated Outbreak Area	Present in Outbreak Country but not Designated Outbreak Area
Initial Risk Assessment	Yes	Yes	Yes
Health Education	Yes	Yes	Yes
Symptom Monitoring	Daily via TIMS #see note below	Monitor twice weekly *see note below	Monitor weekly *see note below
Movement Restrictions	Quarantine	None	None
Travel	Not permitted	Advance notification to local health department/PADOH	Advance notification to local health department/PADOH

High risk exposures will receive a single phone check-in on days 8-10, in addition to daily TIMS monitoring.

*Individual can be monitored on a daily basis using TIMS at the discretion of the local health department or PADOH.

Clinical Assessment/Management of Symptomatic People

Health departments should conduct an assessment of any potentially exposed person with [signs or symptoms](#) compatible with EVD to determine if the definition for [person under investigation \(PUI\)](#) for EVD is met and coordinate additional medical evaluation as needed. The purpose of the public health assessment is to ensure appropriate infection control precautions are in place during transport and at the healthcare facility for a patient who meets the definition of PUI for EVD. The assessment is also intended to minimize potential unintended consequences in managing a symptomatic traveler as a PUI if the exposure risk is very low, including unnecessary implementation of infection control precautions suitable for EVD or delayed recognition and management of other potentially life-threatening conditions while ruling out EVD. CDC has published [clinical guidance](#) for assessing viral hemorrhagic fever risk in an international traveler. If PUIs develop symptoms, the PADOH should be notified immediately by calling 877-PA-HEALTH to activate the state's Ebola Response Plan. Public health physicians at PADOH can assist health departments with clinical assessments on suspect cases.

Symptomatic people with suspected or confirmed EVD should remain in isolation until they have been determined not to have EVD (if suspected) or to be no longer infectious (if confirmed). Asymptomatic people with [high-risk exposures](#) to Ebola virus should remain in quarantine until 21 days after their last high-risk exposure.

People with suspected (i.e., meets PUI definition) or confirmed EVD, and those with high-risk exposures, are not permitted to travel by commercial transport until cleared by public health officials. If travel is necessary (e.g., to obtain medical care that is not available locally), transportation should be conducted in a manner that does not expose operators (e.g., air crews, bus drivers) or other travelers. The mode of transportation (e.g., ground vs. air transportation) should be determined by distance to final destination as well as the clinical condition of the traveler (i.e., whether medical care may be needed en route).

People with suspected or confirmed EVD should be transported only by medical transport (i.e., ground or air ambulance) with infection control precautions in place to protect medical personnel. Specialty EMS transport teams have been established for transporting PUIs to a designated Ebola Assessment/Treatment Facility. These transport teams and facilities can be activated by notification to PADOH by calling 877-PA-HEALTH.

Early recognition is critical to controlling the spread of Ebola virus. Consequently, healthcare personnel should elicit the patient's travel history and consider the possibility of Ebola in patients who present with fever, myalgia, severe headache, abdominal pain, vomiting, diarrhea, or unexplained bleeding or bruising. Should the patient report a history of recent travel to one of the affected outbreak areas and exhibit such symptoms, immediate action should be taken.

Information about EVD disease and guidance for clinicians on screening and caring for suspect EVD patients can be found at: <https://www.cdc.gov/vhf/ebola/clinicians/index.html>. Infection control precautions should be implemented for any patient in whom a diagnosis of Ebola is being considered. Guidance is available from CDC at: <https://www.cdc.gov/vhf/ebola/clinicians/evd/infection-control.html>

There is currently no FDA-licensed vaccine to protect against Sudan virus infection. The Ebola vaccine licensed in the United States ([ERVEBO](#),® Ebola Zaire Vaccine, Live, also known as V920, rVSVΔG-ZEBOV-GP or rVSV-ZEBOV) is indicated for the prevention of EVD due to Ebola virus (species *Zaire ebolavirus*), and based on studies in animals, it is not expected to protect against Sudan virus or other viruses in the *Ebolavirus* genus. Also, there is currently no FDA-approved treatment for Sudan virus.

In the absence of early diagnosis and appropriate supportive care, EVD is a disease with a high mortality rate; occasional outbreaks have occurred mostly on the African continent. With intense supportive care and fluid replacement, mortality rates may be lowered. EVD most commonly affects humans and nonhuman primates (such as monkeys, gorillas, and chimpanzees). The genus *Ebolavirus* is known to comprise the following six species:

- Ebola virus (species *Zaire ebolavirus*)
- Sudan virus (species *Sudan ebolavirus*)
- Taï Forest virus (species *Taï 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 four (Ebola, Sudan, Taï Forest, and Bundibugyo viruses) are known to cause EVD in humans. Infection with any Ebola species presents as clinically similar disease. Previous outbreaks of Sudan virus have had a mortality rate of approximately 50%.

Training Resources

Frontline healthcare facilities are reminded to utilize the training resources that have been developed by PADOH and partners to increase awareness and preparedness for a potential EVD patient. These training resources can be found online through the TRAIN-PA portal here [Frontline Facility Readiness for Highly Infectious Diseases \(HID\)](#). These training modules provide awareness level training and are recommended for healthcare partners who may interact with a patient that presents at a facility with symptoms/suspicion of having a highly infectious disease. Please note that individuals will need to have a TRAIN-PA account to complete these modules; for

more information, please visit <https://www.train.org/pa>. Continuing Education Credits are available for nurses and EMS providers upon completion of all modules.

Laboratory Testing

If testing for Ebola virus is being considered for any patient, the **PADOH must be consulted immediately.** The PADOH will coordinate joint consultation with the PADOH Bureau of Laboratories (BOL) and the CDC. During that consultation the need for testing will be carefully evaluated. If testing is approved, guidelines will be provided for the number and type of specimens to collect for submission together with the appropriate shipping instructions for those specimens. Neither the BOL nor the CDC will accept specimens **without prior consultation and approval.**

Definitions

High-risk Exposure

- Percutaneous (i.e., piercing the skin), mucous membrane (e.g., eye, nose or mouth), or skin contact with blood or body fluids¹ of a person with known or suspected EVD
- Direct contact with person who has known or suspected EVD
- Providing health care to a patient with known or suspected EVD without use of recommended personal protective equipment (PPE)², or experiencing a breach in infection control precautions that results in the potential for percutaneous, mucous membrane, or skin contact with the blood or body fluids of a patient with EVD while working in an Ebola treatment hospital or associated facility (e.g., laboratory) or while taking care of a patient with EVD
- Direct contact with or the occurrence of a breach in infection control precautions while handling a dead body in an Ebola outbreak area, the body of a person who died of EVD or had an illness compatible with EVD, or who died of unknown cause after any potential exposure to Ebola virus
- Living in the same household as a person with symptomatic known or suspected EVD

¹ Body fluids include but are not limited to feces, saliva, sweat, urine, vomit, sputum, breast milk, tears and semen.

² Recommended PPE should be sufficient to prevent skin or mucous membrane exposure to blood or body fluids.

If you have questions about this guidance, please call your local health department or **1-877-PA-HEALTH (1-877-724-3258)**.

Individuals interested in receiving further PA-HANs are encouraged to register at <https://www.health.pa.gov/topics/prep/PA-HAN/Pages/HAN.aspx>.

Categories of Health Alert messages:

Health Alert: conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: provides important information for a specific incident or situation; may not require immediate action.

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of October 13, 2022 but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject.