DATE: 4/5/2023
TO: Health Alert Network
FROM: Debra L. Bogen, M.D., FAAP, Acting Secretary of Health
SUBJECT: Marburg Virus
DISTRIBUTION: Statewide
LOCATION: n/a
STREET ADDRESS: n/a
COUNTY: n/a
MUNICIPALITY: n/a
ZIP CODE: n/a

This transmission is a “Health Advisory,” and 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

SUMMARY
• The Pennsylvania Department of Health (DOH) is alerting healthcare providers, laboratories, infection control specialists, and local health departments about the current outbreaks of Marburg virus in Tanzania and Equatorial Guinea.
• DOH urges healthcare providers to consider Marburg virus in patients who have had travel to Tanzania and Equatorial Guinea in the last 21 days who present with the following symptoms: fever, chills, headache, myalgia, rash, diarrhea, vomiting, or unexplained bleeding
• Providers who have a patient with these symptoms and recent travel within the last 21 days to Equatorial Guinea or Tanzania should contact their local health department or the DOH Bureau of Epidemiology, 717-787-3350.

Background

According to the CDC, on February 13, 2023 government officials in Equatorial Guinea declared a Marburg Virus outbreak in Kie-Ntem Province in the northeast corner of the country. Currently the virus has been detected in an additional 2 provinces in Equatorial Guinea (Centro-Sur and Litoral). Then on March 21, 2023 the Tanzanian government declared the country’s first ever Marburg virus outbreak. Tanzania’s cases have been reported in its northwest region of Kagera.

Marburg virus is an animal-borne RNA virus of the filovirus family and is related to the Ebola virus. It was first recognized in 1967 when simultaneous outbreaks of hemorrhagic fever...
occurred in laboratories in Germany and Yugoslavia (now Serbia). The reservoir host of Marburg virus is the African fruit bat *Rousettus aegyptiacus*, which is a cave-dwelling bat found widely across Africa.

As of March 26, 2023, Tanzania has reported 8 cases with 5 deaths and Equatorial Guinea 35 cases with 27 deaths in this current outbreak.

**Transmission:**

It is unknown how Marburg virus first spreads from its animal host to people. After it is transmitted from the animal host it is then transmitted through person-to-person contact. The virus spreads through contact with an infected person’s blood and/or bodily fluids. Also, objects contaminated with bodily fluids from an infected person (such as clothes, bedding, needles, and medical equipment) can transmit the virus.

**Clinical Presentation:**

The incubation period can range from 2-21 days. **Symptom onset** is sudden and marked by fever, chills, headache, and myalgia. Around the fifth day after onset, a maculopapular rash most prominent on the trunk may occur. As the infection progresses the patient will have nausea, vomiting, chest pain, sore throat, abdominal pain, and diarrhea. In the later stages of infection, the symptoms become increasingly severe and can include jaundice, inflammation of the pancreas, severe weight loss, delirium, shock, liver failure, massive hemorrhage and multi organ dysfunction and failure eventually leading to death.

Treatment is primarily supportive. The case-fatality rate for Marburg virus is 23-90%.

**Detection of Marburg:**

All providers should perform a thorough travel history for the prior 21 days on any patient who presents with symptoms of Marburg virus including: fever, chills, headache, myalgia, rash, diarrhea, vomiting, or unexplained bleeding. If a provider is caring for a patient with these symptoms and the patient has had recent travel, within the last 21 days, to Equatorial Guinea or Tanzania, should immediately call their local health department or the PA DOH at 717-787-3350 to discuss the case and determine testing.

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 April 5, 2023 but may be modified in the future.