ASEAN BIODIASPORA VIRTUAL CENTER | DISEASE ALERT

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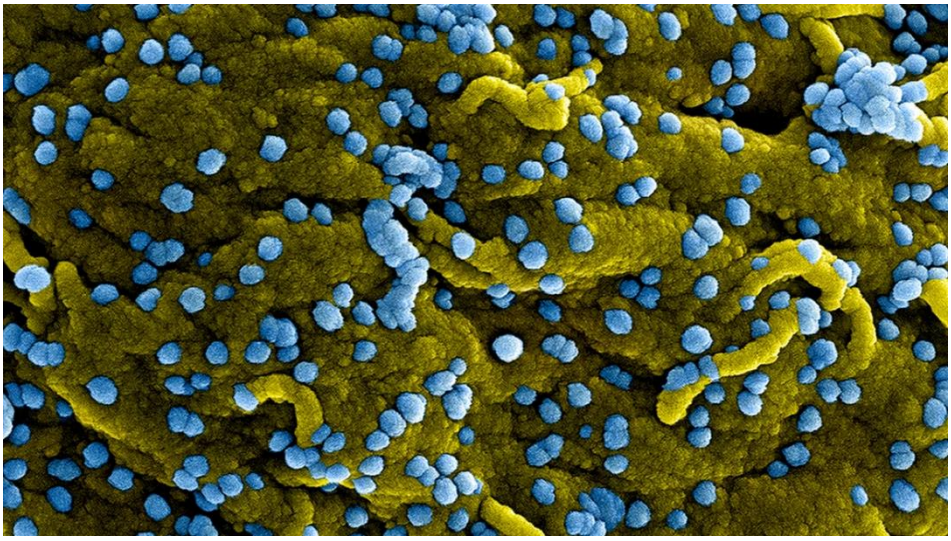
First alert: 1 October 2024 | Marburg Virus Disease in Rwanda

SUB-LOCATIONS AFFECTED

Eastern Province (Gatsibo District, Nyagatare District), Kigali Province (Gasabo District, Kicukiro District, Nyarugenge District), Southern Province (Kamonyi District), Western Province (Rubavu District)



Source: https://www.cnn.com/2024/09/30/health/marburg-virus-rwanda-outbreak-disease/index.html

Event Description

Rwanda is currently facing its first-ever outbreak of Marburg Virus Disease (MVD), a severe and often fatal illness in the same family as Ebola. The outbreak, confirmed on September 27, 2024, has rapidly become a significant public health concern.

As of September 29, 2024, health authorities have reported 26 confirmed cases, including 8 deaths, across seven of Rwanda's 30 districts. Alarmingly, over 70% of the cases are healthcare workers from two facilities in Kigali, highlighting the high risk to medical personnel and the urgent need for enhanced infection control measures in healthcare settings.

The Rwanda Ministry of Health, supported by the World Health Organization (WHO) and other partners, is coordinating a robust response. This includes isolating and treating confirmed cases,

conducting extensive contact tracing with 300 individuals under surveillance and implementing public health measures to contain the spread.

The absence of specific treatments or vaccines for MVD underscores the critical importance of early detection and supportive care to improve patient outcomes. The WHO has assessed the risk as very high at the national level, high at the regional level, and low globally, emphasizing the need for heightened vigilance and preparedness, particularly in neighboring countries.

This outbreak serves as a stark reminder of the ongoing threat of emerging infectious diseases and the crucial role of strong health systems and rapid response capabilities in managing such crises.

Epidemiological Information of Cases

- Rwanda's health authorities reported the country's first-ever cases of Marburg virus disease (MVD) on September 27, 2024. The exact number of infections wasn't specified in the initial announcement. This outbreak is significant not only for Rwanda but also for the wider region, as it represents the fourth recorded instance of MVD in West Africa throughout its known history.
- The Rwandan Ministry of Health (MOH) released an update on September 28, 2024, revealing the extent of the Marburg virus disease (MVD) outbreak. The official report confirmed multiple cases and fatalities, with healthcare professionals among those affected. The exact numbers were not specified in this statement, but the inclusion of medical staff among the victims highlights the outbreak's severity and the heightened risk to frontline workers.
- On September 29, 2024, the World Health Organization's African Region Office released a statement regarding the ongoing Marburg virus disease (MVD) outbreak in Rwanda. The report revealed that the outbreak has now been detected in at least seven of Rwanda's 30 districts, indicating a significant geographical spread. However, the specific districts affected were not disclosed in this announcement. In a separate update on the same day, Rwanda's Ministry of Health reported two additional fatalities linked to the MVD outbreak
- The World Health Organization (WHO) released an update on September 30, 2024, providing more detailed information about the Marburg virus disease (MVD) outbreak in Rwanda, which was initially confirmed on September 26, 2024. According to the latest surveillance data as of September 30:
    - The total number of laboratory-confirmed cases has risen to 27, including 9 fatalities. More than 70% of the reported cases are healthcare workers from two distinct facilities in Kigali.
    - Cases have been recorded in four out of the five provinces, including Kigali Province (Gasabo, Kicukiro, Nyarugenge), Eastern Province (Gatsibo, Nyagatare), Southern Province (Kamonyi), and Western Province (Rubavu).
    - Among the 300 identified close contacts, one had traveled abroad (destination not specified) but completed the observation period without showing any symptoms.

Response Measures

The Rwandan government is working closely with the WHO and other partners to manage the outbreak. To aid in early case detection, the Ministry of Health has made the Rwanda Biomedical Center's hotline available to the public for reporting symptoms. Comprehensive epidemiological investigations, contact tracing, and monitoring are ongoing, while suspected cases are being isolated for testing and treatment. Infection prevention and control (IPC) protocols, along with Water, Sanitation, and Hygiene (WASH) measures, have been implemented across all healthcare facilities. Additionally, efforts to enhance risk communication and engage communities (RCCE) are being intensified, including initiatives to address rumors and misinformation. Furthermore, recent measures to prevent further transmission include 1) restricted funeral sizes for fatal cases up to 50 people, and 2) no hospital visitations for the next 14 days except for one caregiver.

Disease Information

- **Pathogen:**
  The Marburg virus is a zoonotic pathogen from the *Filoviridae* family, which also includes the Ebola virus.
- **Host:**
  The African fruit bat (*Rousettus aegyptiacus*) is the main natural reservoir. It can transmit the virus to both animals and humans, either directly or indirectly, such as through contact with contaminated fruits like figs, mangoes, or dates.
- **Transmission:**
  Once the virus crosses from animals to humans, it spreads through direct contact with the bodily fluids of infected individuals or through contact with contaminated surfaces and materials.
- **Symptoms:**
  Common symptoms include fever, headache, vomiting, nausea, and severe cases may result in hemorrhagic symptoms.
- **Fatality Rate:**
  The Marburg virus is extremely infectious, with a fatality rate that varies between 24% and 88%, depending on the strain and how quickly cases are diagnosed and treated.

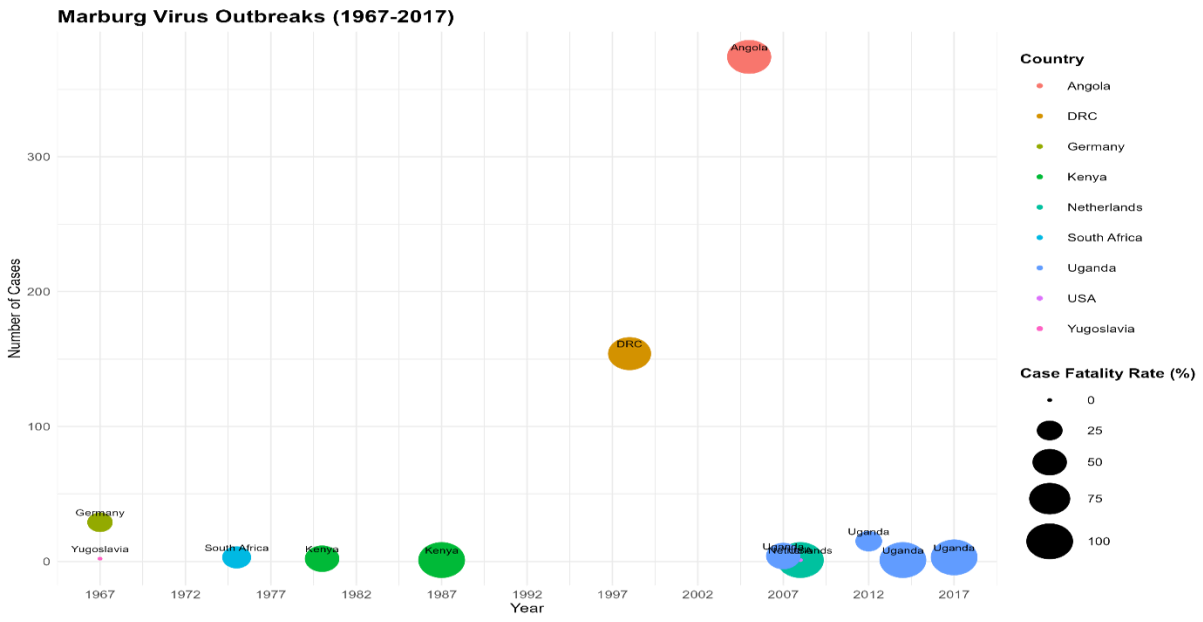


Figure 1. Marburg Virus Outbreak

Sources:

1. **BlueDot**. (2024, September 30). BlueDot Portal. Available at: https://portal.bluedot.global/.
2. **World Health Organization (WHO).** (2024, September 30). *Disease outbreak news: 2024-DON537*. Retrieved from https://www.who.int/emergencies/disease-outbreak-news/item/2024-DON537
3. **Ministry of Health of Rwanda.** (2024, October 1). Marburg Virus Update. Retrieved from https://x.com/rwandahealth/status/1840845160369848772?s=12
4. Okafor, M. (2024, October 1). *Rwanda limits funeral sizes due to Marburg virus outbreak*. BBC News. Retrieved from https://www.bbc.com/news/articles/c5y3pxky2lno