SUDAN VIRUS DISEASE (SVD) OUTBREAK, UGANDA

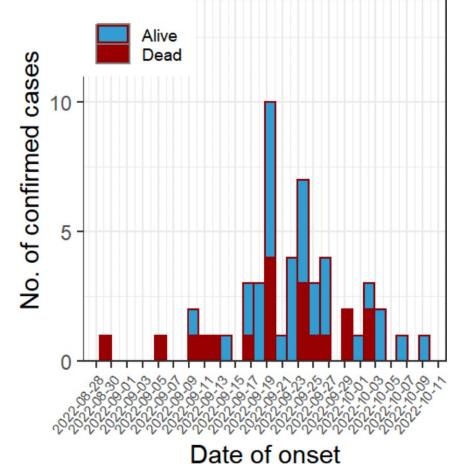
Member State Briefing — 13 October 2022



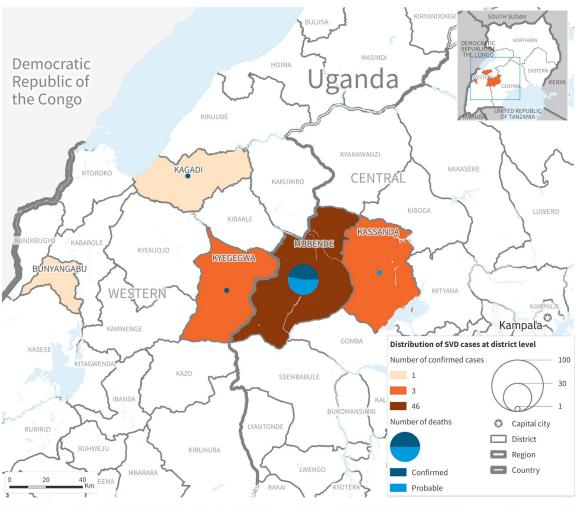
Summary of the situation (as of 10 October 2022)

Total cases (in 5 affected districts)	74 (incl. 11 HCWs)			
Confirmed cases	54			
Probable cases	20			
Total deaths	39 (incl. 4 HCWs) CFR: 53%			
Confirmed deaths	19 CFR: 35%			
Probable deaths	20			
Total admissions	153			
Currently admitted	45 (incl. 5 HCWs)			
Last 24 hours				
Confirmed cases	6 (all from Mubende)			
Confirmed deaths	2			
Contacts currently listed for follow-up	668			
Contacts followed up (%)	625 (94%)			
Contacts developing symptoms	3			
Alerts received	27			
Alerts verified (%)	20 (74%)			
Alerts meeting suspected case definition	16			

Distribution of SVD cases by status and date of onset



Distribution of SVD cases in Uganda (as of 10 October 2022)



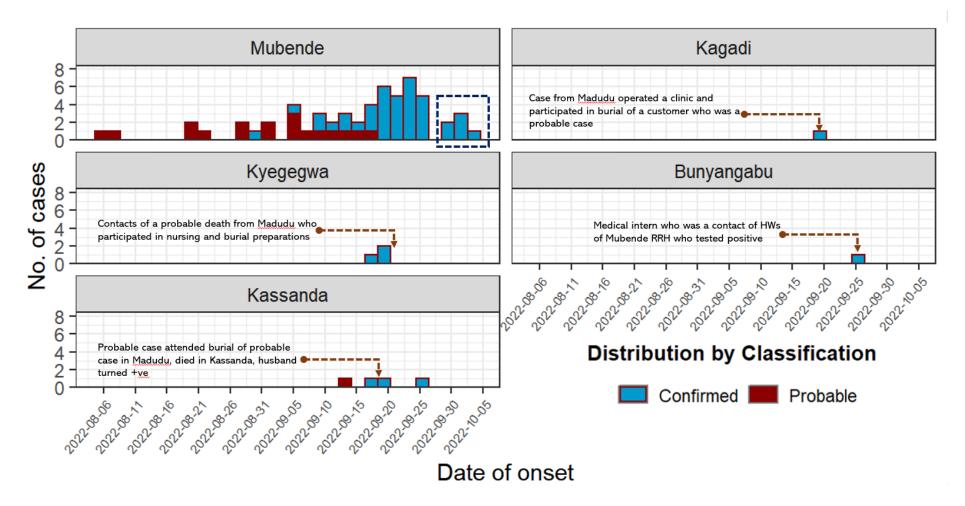
The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full gazement. Data Source: Uganda Ministry of Public Health, Uganda Bureau of Statistics, World Health Organization, OpenStreetMap Map Production: WHO Health Emergencies Programme Map Date: 12 October 2022



District	Sub- County	Confirmed Cases	Confirmed Deaths	Probable Deaths*
Mubende	Madudu	16	07	13
	Eastern Division	07	01	00
	Southern Division	06	01	00
	Bayeza	01	01	01
	Western Division	02	01	00
	Kasambya	03	00	00
	Kibalinga	01	01	00
	Kiruuma	06	03	05
	Kitenga	01	00	00
	Kiyuni	03	02	00
Kyegegwa	Kasule	03	01	00
Kassanda	Kassanda	02	00	01
	Kalwana	01	00	00
Kagadi	Kagadi TC	01	01	00
Bunyangabu	Rwimi TC	01	00	00
Total		54	19	20

^{*}All probable deaths reported as occurring before 20 September 2022.

Epidemiological curve showing confirmed and probable cases by district (n=74)





Scenario planning

Scenario 1: Best case scenario

- Early detection; contact tracing >90%; limitation with current geographical location
- 3.5 to 4 months

Scenario 2: Sustained

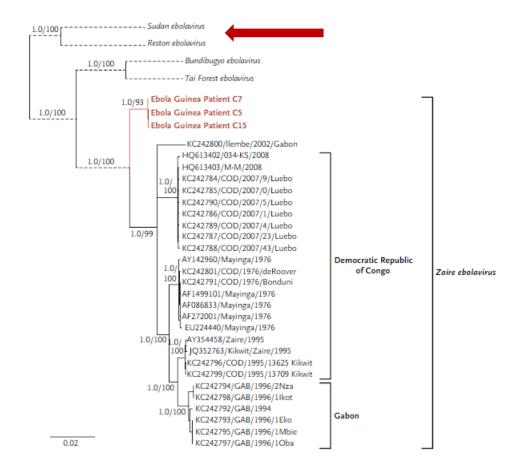
- Delay in detection; inadequate contact tracing; spill over into other districts but limited to current geographical location in 20 high risk districts
- Additional isolation facilities may be required
- 6-8 months

Scenario 3: Worst case scenario

- Inadequate contact tracing; mobility of population; spread beyond current high-risk districts or complex urban setting or spill over into neighboring country
- Overstretched resources; requiring whole of government response
- Timeline unclear



Nomenclature and Phylogeny



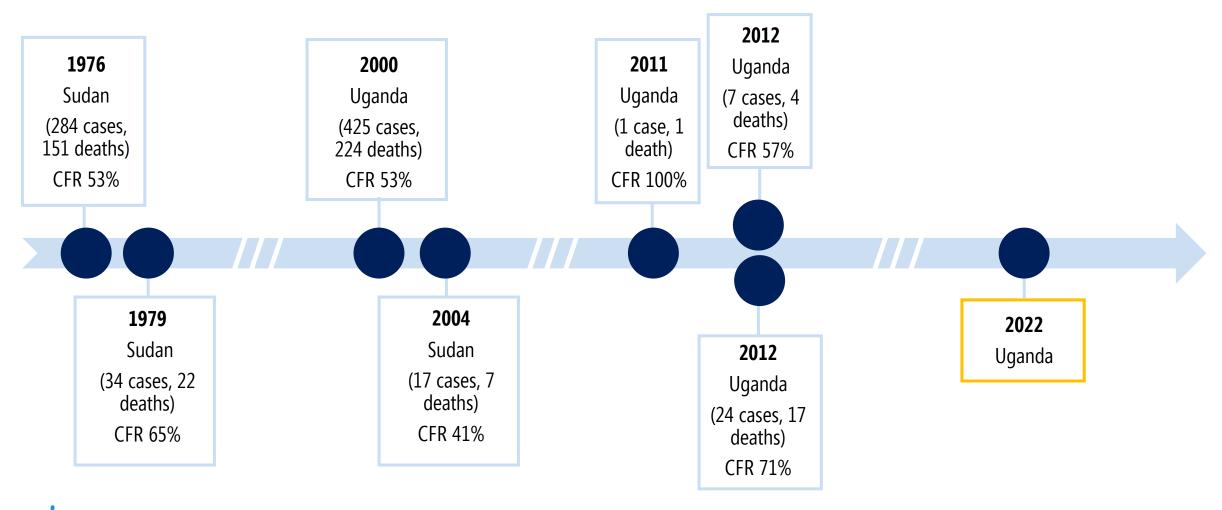
https://www.researchgate.net/publication/261996003 Emergence of Zaire Ebola Virus Disease in Guinea - Preliminary Report



Filovirus disease (FVD) classification, per the **International Classification of Diseases Revision 11 (ICD-11)**, as of 2019:

- First disease subcategory: Ebola disease (EBOD)
 - Second disease subcategories:
 - Bundibugyo virus disease (BVD)
 - Ebola virus disease (EVD)
 - Sudan virus disease (SVD)
 - Atypical Ebola disease
 - Other specified Ebola disease
 - Ebola disease, virus unspecified
- First disease subcategory: Marburg disease (MARD)
 - Second disease subcategories:
 - Marburg virus disease (MVD)
 - Atypical Marburg disease
 - Other specified Marburg disease
 - Marburg disease, virus unspecified
- First disease subcategory: Other specified filovirus disease
- First disease subcategory: Filovirus disease, virus unspecified

Historical outbreaks of Sudan Virus Disease (SVD)





Coordination, Risk Assessment and PSEAH

• WHO conducted a **rapid risk assessment** on 21 Sept — assessed as **high risk** at national level, **moderate risk** at regional level and **low risk** at global level. Update of rapid risk assessment is anticipated.

Overall risk				
National	Regional	Global		
High	Moderate	Low		

- Following risk assessment, WHO activated the **incident management system (IMS)** across the three levels of the organization on 21 Sept, per the Emergency Response Framework. WHO is working closely with Ministry of Health of the Republic of Uganda on all aspects of response.
- **USD 500,000** initially released for Uganda from the **Contingency Fund for Emergencies** on 26 Sept, with additional **USD 4.5 million** approved on 4 Oct (including USD 1.5 million for Uganda and USD 3 million for preparedness activities in surrounding countries).
- Go.Data is installed on Ministry of Health Uganda server and was first used in Uganda during Ebola virus disease outbreak in Kasese in June 2019 and most recently for COVID-19. **Go.Data in use for current SVD outbreak response and contact tracing activities are improving.**
- Mobilizing partners through Global Outbreak Alert and Response Network (GOARN). **GOARN Request for Assistance** issued on 30 Sept with 18 offers received to date, across various functions. Case management experts deployed.



- All personnel deployed are being debriefed & mandated to sign pre-deployment checklist, per **PSEAH minimum standards**. Ongoing recruitment to identify a PSEAH inter-agency coordinator. Ongoing recruitment for PSEAH focal points in surrounding countries.
- Identified need to coordinate partners and strengthen **PSEAH referral pathways** medical support, psychosocial support, legal support and reintegration support.



Laboratory and diagnostics, Case management and Infection Prevention and Control

Laboratory and diagnostics

- Emergency use assessment and listing (EUAL) opened in 2014 in response to EVD outbreak in West Africa. Two EUAL assays can detect Sudan virus:
 - WHO EUAL RealStar® Filovirus Screen RT-PCR Kit 1.0
 - WHO EUAL Liferiver™ Ebola Virus (EBOV) Real Time RT-PCR
- Both EUAL assays detect pan-Ebola, however they do not distinguish species (i.e. Zaire, Sudan, etc.). Labs may use in-house assays that detect and differentiate Ebola viruses, filoviruses, and other viral haemorrhagic fevers.
- Sequencing should be used to support outbreak response and understand transmission dynamics.

Case Management

• <u>Strategic priorities:</u> **1)** Deliver safe and quality care: screen/triage and access to diagnostics, delivery of optimized supportive care (point-of-care clinical testing) through recovery and care of survivors. **2)** Ensure safe patient-centered treatment centres of sufficient size and with trained multi-disciplinary staff are available in strategic locations; **3)** Evaluate investigational products in clinical trials.

Infection Prevention and Control (IPC)

- Recommendations for IPC practices in SVD outbreak response are based on existing WHO EVD guidance, with updates centered around new evidence, changes in practice and lessons learned following past EVD outbreaks.
- IPC strategy intended to provide guidance for district level planning and delivery of IPC in response to an SVD outbreak at healthcare, household and community levels has been developed and shared with the Ministry of Health.





Vaccine and Therapeutic Research

- Critical to integrate high quality research within outbreak response.
- Vaccines there are no licensed vaccines for SVD.
 - WHO is supporting the Government of Uganda in the initiation of a ring vaccination trial, using the ChAd3 (Sabin Vaccine Institute) and ChadOX1 (Oxford University) vaccines.
 - Protocol is under review (vaccination of contacts) and Principal Investigator has been identified by Government of Uganda.
 - Vaccines will be imported as soon as the study protocol is approved and importation permit is received.
 - List of vaccine candidates in research & development available via the Sudan Virus Vaccine Tracker on WHO website: here.
- Therapeutics there are no licensed therapeutics for SVD.
 - WHO has organized an expert group to review and prioritize candidate treatments, and a global group of experts is also developing a protocol.
 - Important that any use of candidate treatments includes documentation of data.









Points of Entry and International Travel

- WHO advises against any restrictions on travel and/or trade to Uganda based on available information for the current SVD outbreak.
- During the 2014 EVD outbreak in West Africa, the IHR emergency committee recommended to all countries that:
 - There should be no general ban on international travel or trade;
 - There should be no international travel of Ebola contacts or cases, unless the travel is part of an appropriate medical evacuation.
- During the 2019/2020 EVD outbreak in Democratic Republic of the Congo, the IHR emergency committee recommended to all countries that:
 - No country should close its borders or place any restrictions on travel and trade;
 - The Committee does not consider entry screening at airports or other ports of entry outside the region to be necessary.
- In April 2022, the WHO Guideline Development Group for International Travel and Health reviewed the effectiveness of syndromic entry screening at land borders and international rivers as a potential intervention to mitigate transmission of non-SARS-CoV-2 infections including Ebola and other viral hemorrhagic fevers to travelers and the destination area.
 - Evidence shows low or very low certainty of evidence.



Challenges

- Late detection of outbreak continues to complicate response. Investigations are ongoing.
- Numerous **ongoing health emergencies** in Uganda, in the African region and globally. Health workforce and other resources are **over-stretched**.
 - Simultaneous presence of **other high impact/burden diseases** (e.g. Crimean-Congo haemorrhagic fever, malaria, typhoid) further complicates differential diagnosis, supportive care and increases chance of late diagnosis.
 - Critical need for better understanding of health care worker and health care associated infections, for assessment of potential nosocomial spread.
- **Labour and time intensive diagnostics**. Diagnosis of SVD is done using conventional RT-PCR. There are currently no point of care tests available for SVD. The GeneXpert cartridge available for Zaire ebolavirus does not detect Sudan ebolavirus.
- No licensed therapeutics and vaccines for SVD. Necessity to integrate research into outbreak response.
- Critical need to focus on **community engagement** for community partnership and ownership.



Support from Member States and Stakeholders

- **Solidarity** with Uganda and neighbouring countries in **response** and **readiness** to prevent and control spread of SVD.
 - Risk of further spread is possible. The whole country and surrounding countries must scale up readiness activities.
 - WHO advises against any restrictions on travel and/or trade.
- Current **resources** are inadequate to address logistical and staffing gaps for outbreak response and maintaining essential health services.
 - Alerts, contact tracing and case investigation need to be further strengthened.
 - **Isolation space and capacity for clinical management** need to be strengthened, and **ring IPC** to be accelerated to prevent nosocomial transmission.
- Continued **collaboration** and **cooperation** between and amongst all stakeholders under the leadership of MoH.



