



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 49 – 2023

(04-10 December 2023)

Editorial message

Effective and efficient disease surveillance system contribute to the reduction of morbidity, disability and mortality from disease outbreaks and health emergencies.

This weekly bulletin presents the epidemiological status of the priority diseases, conditions, and events under surveillance in Rwanda. These data are useful to trigger a rapid response for rapid impact, actions and results oriented, a proactive preparedness, risk mitigation and prevention, intelligence, real-time information, and communication for decision making.

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KEY EPIDEMIOLOGICAL HIGHLIGHTS

EPIDEMIOLOGICAL WEEK 49

Event Based Surveillance (EBS) Highlights:

- During the epidemiological week 49, two human deaths were notified through the electronic Community Event Based Surveillance System (eCEBS).
- Two alerts were identified through the Epidemic Intelligence from Open Source (EIOS):
 - Four people have died of Cholera in Missenyi District
<https://dailynews.co.tz/four-people-have-died-of-cholera-in-missenyi-district/>
 - Kenya flood death toll rises to 154.
http://french.china.org.cn/foreign/txt/2023-12/05/content_116860200.htm

Indicator Based Surveillance (IBS) Highlights:

- 297 immediate reportable diseases were notified by health facilities countrywide. These include the cases of acute flaccid paralysis (AFP), mumps, severe malaria; bloody diarrhea, measles/rubella, cholera and chicken pox.
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for Epi Week 49 revealed that flu syndrome and severe pneumonia for under 5 years surpassed the epidemic thresholds.
- A total of 64 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. The majority of deaths were perinatal deaths and deaths of children under 5 years.

Outbreaks and events updates in week 49

Foodborne illness in Nyarugenge DH, Gisozi sector, Musezero Cell, Nyakiriba Village

Completeness and timeliness

In Epi Week 49, the overall completeness and timeliness of surveillance data reporting in Rwanda was 99% and 95% respectively.

WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 49

Description: *Event Based Surveillance (EBS) is a type of public health surveillance system that detects and reports unusual health events or disease outbreaks in a timely manner. The system is designed to detect signals of potential public health threats and allow a rapid response to prevent or control the spread of diseases. RBC is implementing EBS through PHS&EPR Division.*

Currently, an electronic Community Event Based Surveillance System (eCBS) and Epidemic Intelligence from Open Source (EIOS) are being used to detect and report events of public health importance from the community and media. The process for establishment of other types of EBS is still being on going.

COMMUNITY BASED SURVEILLANCE

During the Epi week 49, two human deaths were notified from community to eCBS:

- 1 case from Rusizi district
- 1 case from Karongi district

MEDIA SCAN

Two alerts from EIOS:

1. Four people have died of Cholera in Misenyi District

She urged residents to take precautionary measures, including washing hands with soap, before taking any meal and doing the same when coming out of a latrine. "The agenda of keeping the environment clean should be permanent. This should be routine for each household to ensure that they have decent toilets and garbage is properly disposed. People should also be sensitized to maintain hygiene and drink boiled water," she said. Ms Mwassa directed District Commissioners (DCs) and District Executive Directors (DEDs) to ensure that surveillance teams are keeping a 24-hour monitoring and give report on any suspected case.

<https://dailynews.co.tz/four-people-have-died-of-cholera-in-misenyi-district/>

2. Kenya flood death toll rises to 154

The death toll from heavy rains and flash floods in Kenya has risen to 154, government spokesperson Isaac Mwaura announced Monday evening. Devastating floods, caused by unusually active El Nino rains in several parts of the East African country, have left several roads impassable, he said. "Road repairs are underway in affected areas, depending on rainwater levels and accessibility." Mr Mwaura added that heavy downpours with isolated storms are expected to accompany these heavy rains throughout this week until December 11 across the country. Health authorities have confirmed 103 cases of cholera in Lamu County (southeast), killing two people.

The Ministry of Agriculture plans to distribute 450,000 doses of vaccine against blue tongue disease and 1.4 million doses of vaccine against Rift Valley fever for livestock in order to strengthen immunization in the affected areas, he added. "Despite these challenges, concerted efforts and interventions continue to be implemented to alleviate the situation of affected communities. The government has made substantial progress in various aspects of assistance and relief efforts," Mr. Mwaura.

http://french.china.org.cn/foreign/txt/2023-12/05/content_116860200.htm

WEEKLY UPDATES ON INDICATOR BASED SURVEILLANCE (IBS)

Description: *Rwanda had implemented Indicator Based Surveillance according to the IDSR guidelines 3rd edition where approximately 45 priority diseases, health conditions and public health events are being monitored and reported from health facilities countrywide on a regular basis. Diseases that are prone to outbreaks are being reported immediately within 24 hours after detection while diseases that are considered as endemic are reported on weekly basis every Monday before midday.*

A. IMMEDIATE REPORTABLE DISEASES – EPI WEEK 49

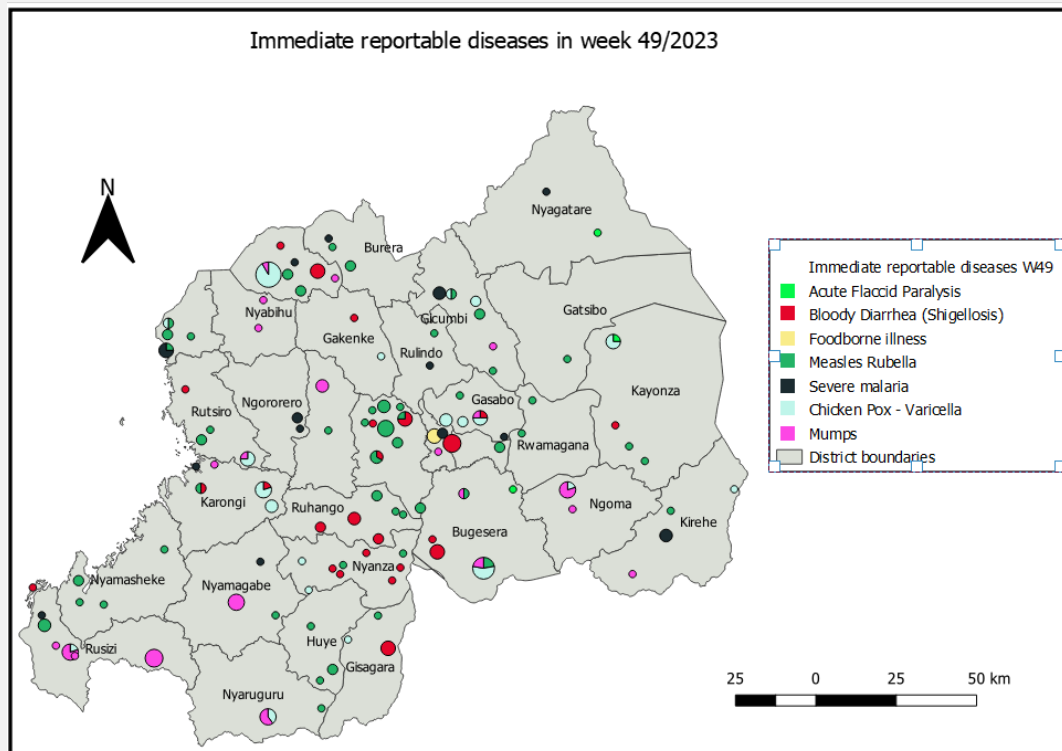
During this Epi week, 236 cases of immediate reportable diseases were notified:

- 49 cases of chicken pox were reported by 20 HFs. Kabere HC (in Ruhengeri RH) crossed the threshold.
- 41 cases of mumps were reported by 21 HCs. No HC crossed the threshold.
- 44 suspected cases of bloody diarrhea (Shigellosis) were reported by 24 health facilities. For samples sent to NRL in the previous week 48, no sample was tested positive for shigella dysenteriae.
- 73 suspected cases of Measles/Rubella were reported by 51 HCs, the samples were taken and sent to NRL, results are pending.
- 22 cases of severe malaria were reported by 14 health facilities, including Byumba DH, CHUK, Gihundwe DH, Kaduha DH, Kibuye RH, Muhororo DH, Nyagatare DH, Musanze HC, Rubona (Ngororero) HC, Rugarama HC, Cyinzuzi HC, Gisenyi HC and Kabuga (Kicukiro) HC.
- 4 suspected cases of foodborne illness were reported by Nyarugenge DH, they are described below in outbreak occurred in week 49.
- 3 cases of acute flaccid paralysis were reported by 3 health facilities: Juru HC, Ndama (Nyagatare) HC, Rukara HC

Notes:

- For the diseases whose cases crossed the thresholds, District Hospitals are recommended to investigate, including: Ruhengeri RH, Byumba DH, CHUK, Gihundwe DH, Nyarugenge DH, Kaduha DH, Kibuye RH, Muhororo DH, Nyagatare DH, Musanze HC, Rubona (Ngororero) HC, Rugarama HC, Cyinzuzi HC, Gisenyi HC and Kabuga (Kicukiro) HC.
- All confirmed cases and suspected cases had been managed at the health facility level.

Geographical distribution of cases:



Distribution of immediate reportable diseases in Epi week 49

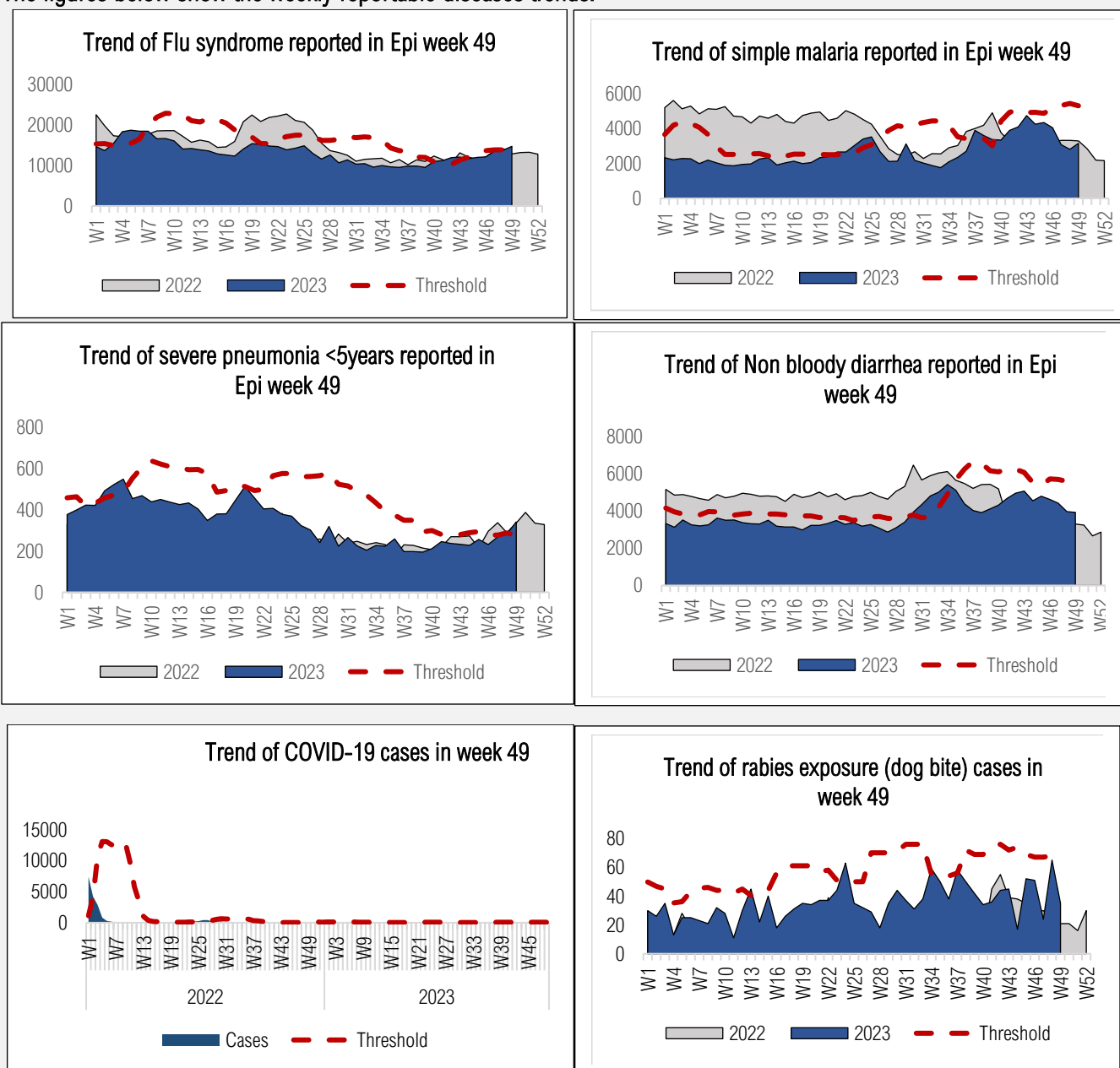
B. WEEKLY REPORTABLE DISEASES – EPI WEEK 49

Description: In Rwanda, after the adaptation of the IDSR guidelines 3rd edition, eight diseases & events are being reported and analyzed on a weekly basis. These include flu syndrome, simple malaria, severe pneumonia for under 5 years, non-bloody diarrhea for under 5 years, COVID-19, dog bites, brucellosis, and trypanosomiasis. The monitoring trends of these weekly reportable diseases or health events helps to detect an unusual increase early.

In Epi Week 49, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to their respective epidemic thresholds. The results of the analysis revealed that severe pneumonia for under 5 years and flu syndrome surpassed the epidemic threshold. The following hospital catchment areas had the cases that surpassed the epidemic threshold for severe pneumonia of under 5 years: Gihundwe, Gisenyi, Kaduha, Kibogora, Kibuye, Kiziguro while for the flu syndrome cases, they were the following: Butaro, Byumba, Gatonde, Gisenyi, Kibagabaga, Masaka, Muhororo, Murunda, Nemba and Nyanza.

Note: for the diseases whose cases crossed the thresholds, those hospitals are recommended to investigate.

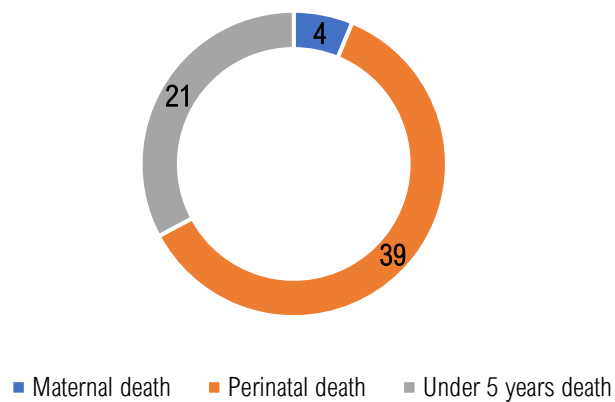
The figures below show the weekly reportable diseases trends:



C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 49

As summarized in the Pie Chart below, a total number of 64 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 39 (61%) were perinatal, 21 (33%) were deaths of children under 5 years old (included 1 death due to severe pneumonia of under 5 children, 4 (6%) maternal deaths.

Type of deaths reported in week 49/2023

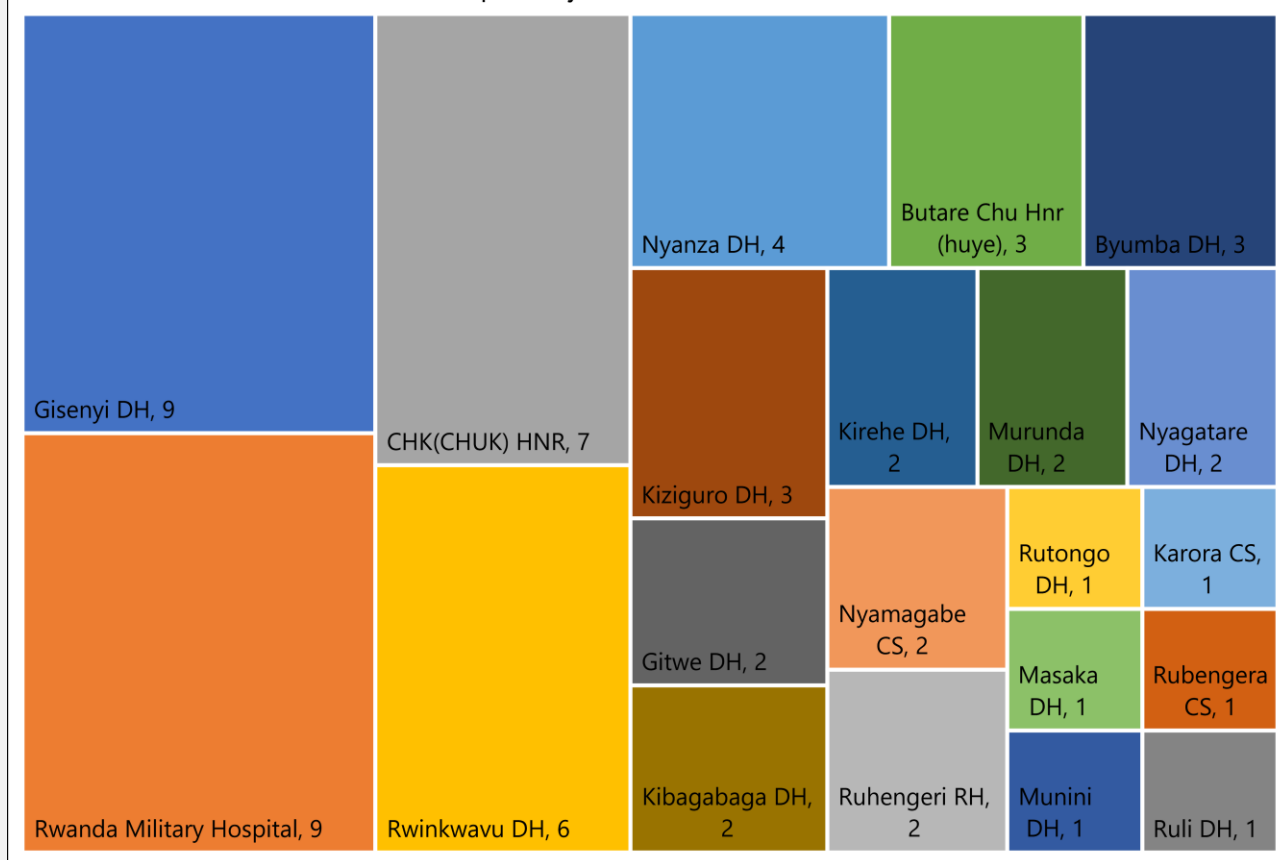


Cause of deaths declared in epi week 49

Deaths were reported from various catchment areas as follow:

- 9 deaths were reported respectively by Gisenyi DH and Rwanda Military Hospital
- 7 deaths were reported by CHUK
- 6 deaths were reported by Rwinkwavu DH
- 4 deaths were reported by Nyanza DH
- 3 deaths were reported respectively by Kiziguro DH, Byumba DH and CHUB
- 2 deaths were reported by Murunda DH, Nyagatare DH, Gitwe DH, Kibagabaga DH, Kirehe DH, Ruhengeri RH and Nyamagabe HC (in Kigeme DH)
- 1 death was reported respectively by Ruli DH, Rutongo DH, Masaka DH, Munini DH, Karora HC (Mugonero DH) and Rubengera HC (Kibuye RH)

Deaths reported by health facilities in week 49/2023



Distribution of deaths by health facilities in Epi week 49

OUTBREAK AND EVENT UPDATES IN EPIDEMIOLOGICAL WEEK 49

FOODBORNE ILLNESS IN NYARUGENGE DH, GISOZI SECTOR, MUSEZERO CELL, NYAKIRIBA VILLAGE

Confirmed cases	04	Date reported:	December 10, 2023	Risk assessment	Low
Suspected cases	04	Source:	eIDSR		
Death(s)	0	District/HFs:	Muhima HC and Nyarugenge DH		
Total cases	04	Geoscope:	Low		

Outbreak description:

On 10/12/2023, 4 people from the same household consulted Muhima HC presenting abdominal pain, vomiting, diarrhea, and headache. They reported to have consumed cassava bread (ubugari) and cassava leaves (Isombe). They were transferred to Nyarugenge DH for further management. Currently, they were treated and have recovered. No sample of stool or food was collected.

Interventions conducted:




-Case management of patients

EVENT OF DOG BITE IN NYAGATARE DH

A dog has bitten 11 people in Nyagatare district, Mukama Sector, Kagina Cell, Cyabahurura, Kagonga and Ngoma Districts. They were all referred to Gatunda DH for further management and among them 2 patients were hospitalized. Unfortunately, one patient, a female of 53 years old passed away on 10/12/2023. The dog was killed after the incident.

eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 49

In Rwanda, eIDSR reports completeness and timeliness are scored as follow:

-  **Greater or equal to 80%: High,**
-  **Between 60% and 79%: Moderate,**
-  **Less than 60%: Low.**

In the Epi Week 49, the overall completeness and timeliness of disease surveillance data reporting in Rwanda was 99% and 95%, respectively. With regards to completeness of surveillance reports, all hospitals had a high completeness (>80%). For the timeliness, the overall score was 95%, and almost all hospitals had a high timeliness (>80%), except Rwanda Military Hospital and Kacyiru police hospital that had a low timeliness (less than 60%).

Notes: The health facility that did not have a high score for the timeliness had been recommended to improve the reporting by submitting weekly surveillance reports not later than Monday before 12:00.

Details on completeness and timeliness for all health facilities are showed in the figures below.

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