



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 01 – 2024

(01-07 January 2024)

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.

Authors: Public Health Surveillance & Emergency Preparedness and Response Division

KEY EPIDEMIOLOGICAL HIGHLIGHTS

EPIDEMIOLOGICAL WEEK 01/2024

Event Based Surveillance (EBS) Highlights:

- During the epidemiological week 01, two human deaths were notified through the electronic Community Event Based Surveillance System (eCEBS)
- Three alerts were identified through the Epidemic Intelligence from Open Source (EIOS):
 - South Sudan declares Yellow Fever outbreak in Yambio.
 - 5 killed by Cholera in Tanzania
 - Zambia cholera death toll rises to 222

Indicator Based Surveillance (IBS) Highlights:

- 144 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, severe malaria, bacterial meningitis, typhoid fever, cholera and chicken pox.
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for Epi Week 01 revealed that no disease 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 01

Suspected cholera outbreak in Rubavu district

Completeness and timeliness

In Epi Week 01, the overall completeness and timeliness of surveillance data reporting in Rwanda was 99% and 97% respectively.

WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 01

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 01, two deaths were notified from community through eCBS:

- 1 from Gatsibo District / Kabuye village
- 1 from Gatsibo District / Kabana Village

MEDIA SCAN

- **South Sudan declares Yellow Fever outbreak in Yambio.**

The case was from an 18-year-old male patient from Kangura village in Gangura Payam, Yambio County of Western Equatoria State who developed symptoms of generalized body weakness, headache, epigastric, discomfort, fever, vomiting of blood and jaundice. The sample sent to the National Public Health Laboratory in Juba and Uganda Virus Research Institute tested positive.

“The Ministry of Health in South Sudan would like to inform the general public of the confirmation of an outbreak of yellow fever in Yambio County, Western Equatoria State,” Awel said in a statement seen by Dawn on Saturday. She said the suspected case was first reported on 21st December 2023. The minister cautioned citizens to take precautions to avoid contracting the disease.

<https://www.sudanspost.com/south-sudan-declares-yellow-fever-outbreak-in-yambio/>

- **5 killed by Cholera in Tanzania**

KAHAMA, Tanzania, Jan. 5 (Xinhua)- At least five people have been killed by cholera and 452 others are under quarantine for observation in Kahama district in Shinyanga region in northwestern Tanzania, an official said on Friday. Mboni Mhita, commissioner of the Kahama district, said 452 patients with symptoms of the disease have been put under quarantine in two isolated health centers of Mwendakulima and Kagongwa for observation. She told a news conference in the Kahama municipality that the five dead were found in Kagongwa village between Dec. 25, 2023 and Jan. 4, 2024, adding they were confirmed to have been killed by the disease after tests of their samples. She said most of them had symptoms of cholera, including profuse watery diarrhea, leg cramps, restlessness or irritability, vomiting and thirst.

<https://english.news.cn/africa/20240106/1beca1fb27084720b29d06056540bd64/c.html>

➤ **Zambia cholera death toll rises to 222**

LUSAKA, Jan. 8 (Xinhua) -- The number of people who have died of cholera in Zambia has risen to 222, while the total number of cases have reached 5,462, since fresh outbreaks in October last year as the waterborne disease spreads to the seventh province, according to the latest health ministry figures.

This followed the death of 27 people and 567 new cases in the previous 24 hours, data released by the ministry on Sunday showed. According to the ministry, 340 people were discharged during the same period, bringing total discharges to 4,172, while the number of people remaining hospitalized stands at 1,059. According to a health ministry daily update, the number of affected districts has reached 31 in seven out of the country's 10 provinces. Lusaka, the country's capital, is the hardest hit. The ministry has designated the China-built National Heroes Stadium as a cholera treatment center.

<https://english.news.cn/20240108/509f3eae932844e29bafada5db55d021/c.html>

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 01

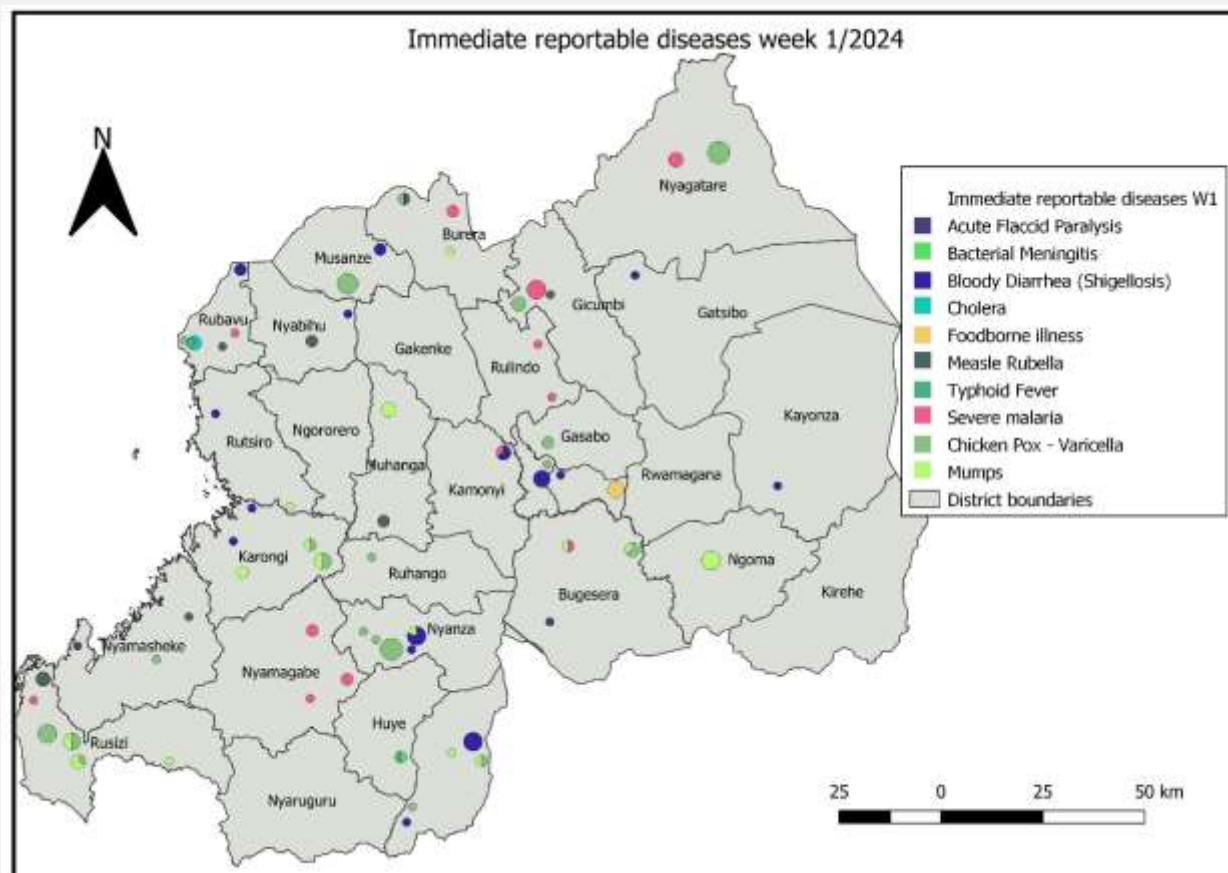
During this Epi week, 144 cases of immediate reportable diseases were notified:

- 47 cases of chicken pox were reported by 20 HFs. No HF crossed the threshold.
- 25 cases of mumps were reported by 15 HCs. No HF crossed the threshold.
- 28 suspected cases of bloody diarrhea (Shigellosis) were reported by 15 health facilities. For samples sent to NRL in the previous week 52, results are still pending.
- 11 suspected cases of Measles/Rubella were reported by 7 HCs. The samples were taken and sent to NRL; results are pending.
- 21 cases of severe malaria were reported by 12 health facilities, including Butaro DH, Byumba DH, Kaduha DH, Kigeme DH, Cyanika HC (in Nyamagabe; Kigeme DH), Gihara HC, Gihundwe HC, Nyagatare DH, Rutongo DH, Muzanza HC (in Kinyinyira PH), Nyamata HC (in Nyamata DH and Nyakiriba HC (Gisenyi DH)
- 2 cases of acute flaccid paralysis were reported by 2 health facilities: Mukoma HC (Nyamasheke; Bushenge DH) and Ruhuha HC (Nyamata DH)
- 4 cases of foodborne illnesses were reported in Masaka DH.
- 1 suspected case of bacterial meningitis was reported by CHUB, the sample was tested, the result was negative
- 3 suspected cases of cholera were reported by Gisenyi DH, they were tested negative on RDT
- 2 suspected cases of typhoid fever were reported by 2 health facilities: 1 from CHUB was, the result became inconclusive, the second case was reported by polyclinic la medicale de Rubavu.

Notes:

- For the diseases whose cases crossed the thresholds, District Hospitals are recommended to strengthen surveillance, investigate and reinforce control measures accordingly. Concerned hospitals include: Butaro DH, Byumba DH, Kaduha DH, Kigeme DH, Cyanika HC (in Nyamagabe; Kigeme DH), Gihara HC, Gihundwe HC, Nyagatare DH, Rutongo DH, Muyanza HC (in Klnihira PH), Nyamata HC (in Nyamata DH and Nyakiriba HC (Gisenyi DH), and Bushenge DH
- All confirmed cases and suspected cases had been managed at the health facility level.

Geographical distribution of cases:



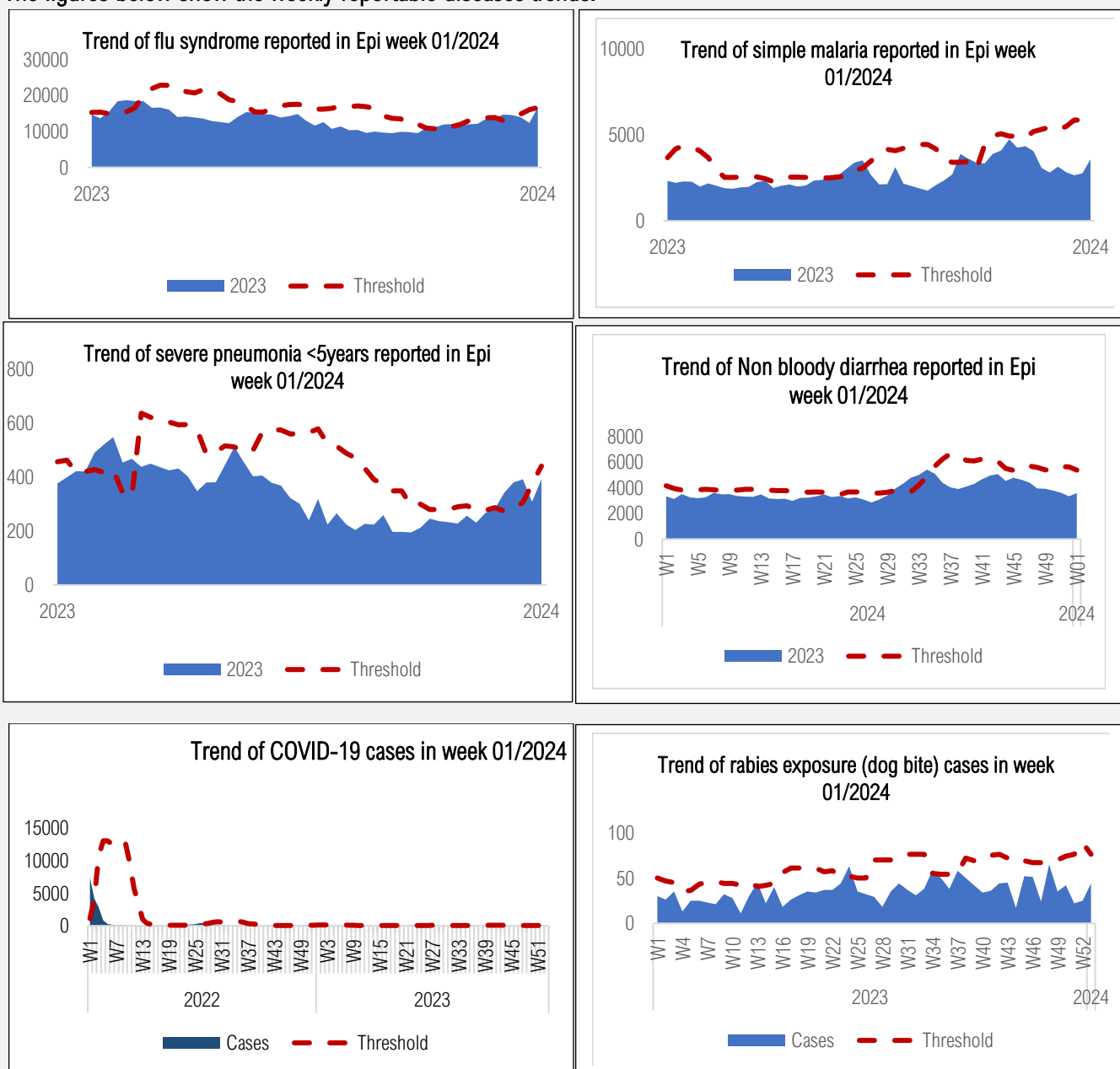
Distribution of immediate reportable diseases in Epi week 01

B. WEEKLY REPORTABLE DISEASES – EPI WEEK 01

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.

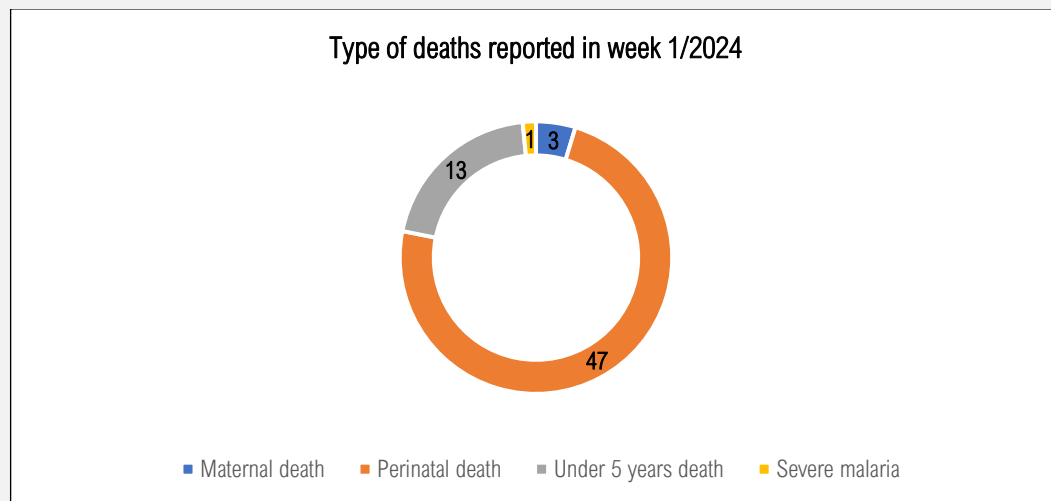
In Epi Week 01, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to their respective epidemic thresholds. The results of the analysis revealed that no disease surpassed the epidemic threshold in all health facilities.

The figures below show the weekly reportable diseases trends:



C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 01

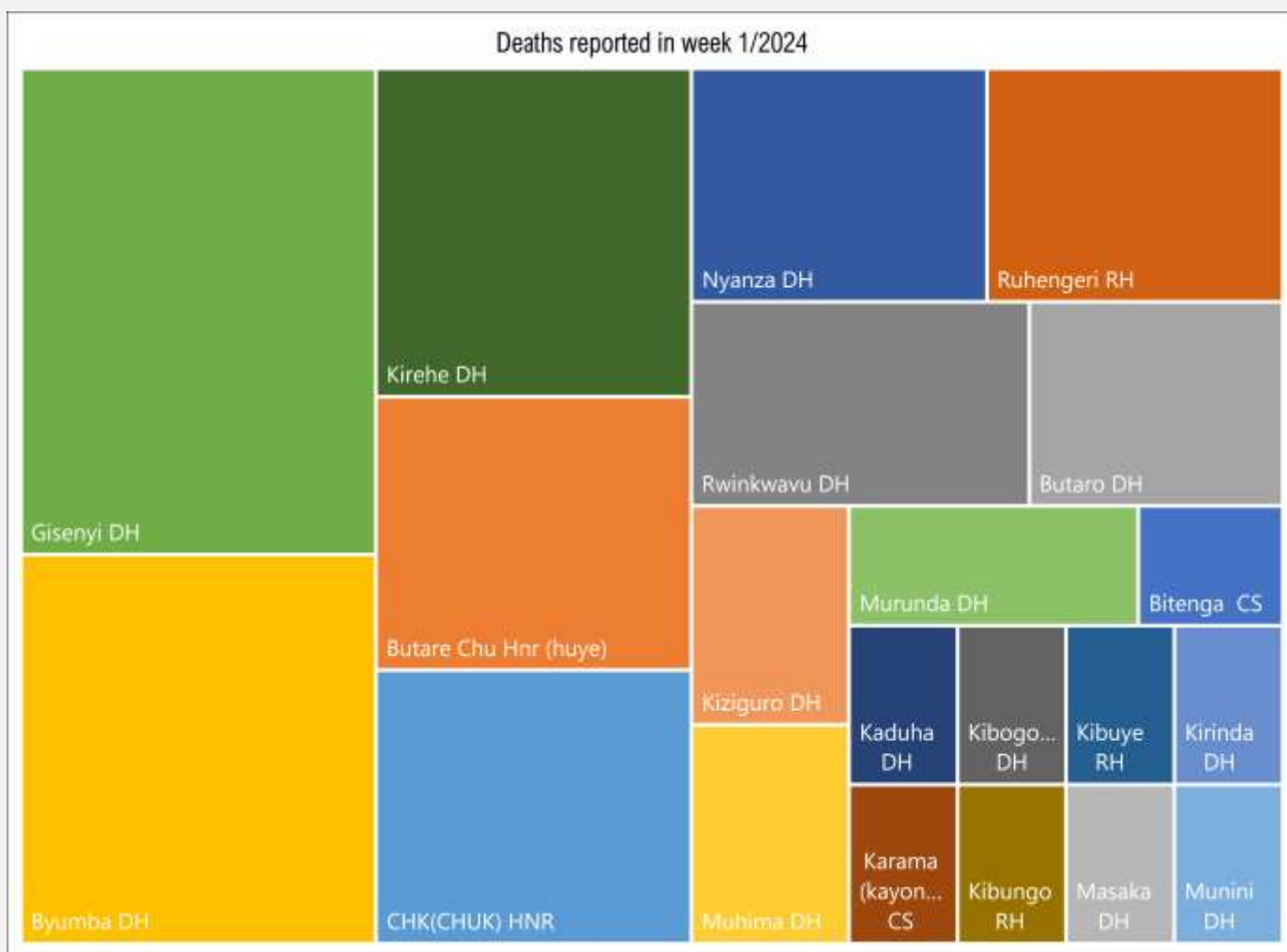
As summarized in the Pie Chart below, a total number of 64 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 47 (73%) were perinatal, 13 (20%) were deaths of children under 5 years old (included 1 due to non-bloody diarrhea), 3 (5%) maternal deaths and 1 (2%) death due to severe malaria.



Cause of deaths declared in epi week 01

64 deaths were reported from various catchment areas as follow:

- 10 deaths were reported by Gisenyi DH: 8 were perinatal deaths and 2 under 5 years deaths.
- 8 deaths were reported by Byumba DH: 5 were perinatal deaths and 3 under 5 years deaths.
- 6 deaths were reported by Kirehe DH: 5 perinatal deaths, 1 under 5 years death
- 5 deaths were reported respectively by CHUB (4 perinatal deaths and 1 maternal death) and CHUK (4 perinatal deaths, 1 under 5 years death)
- 4 deaths were reported respectively by Ruhengeri RH (2 perinatal deaths, 1 under 5 years death and 1 maternal death); Nyanza DH (4 perinatal deaths) and Rwinkwavu DH (3 perinatal deaths, and 1 maternal death)
- 3 deaths were reported by Butaro DH (2 perinatal deaths and 1 severe malaria)
- 2 were reported respectively by Kiziguro DH, Muhima DH and Murunda DH (all were perinatal deaths)
- 1 death was reported respectively by Kaduha DH, Karama HC (Kayonza), Kirinda DH and Masaka DH (it was respectively 1 perinatal death), Kibogora DH, Bitenga HC, Kibungo RH, Kibuye RH, Munini DH, reported respectively 1 under 5 death.



Distribution of deaths by health facilities in Epi week 01

OUTBREAK AND EVENT UPDATES IN EPIDEMIOLOGICAL WEEK 01

SUSPECTED CHOLERA OUTBREAK IN RUBAVU DISTRICT

Confirmed cases	0	Date reported:	January 07, 2024	Risk assessment	Low
Suspected cases	3	Source:	eIDSR		
Death(s)	1	District/HFs:	Gisenyi DH		
Total cases	3	Geoscope:	Low		

Outbreak description:

On 07 January 2024, Gisenyi DH reported 3 suspected cholera cases from Kitarima village, Rukoko cell, Rubavu sector, Rubavu district (2 males aged 23 and 22, and one female aged 5). The cases belong to the same household. The symptoms comprising watery diarrhea, vomiting and dehydration since January 6th, 2024. They sought medical consultation at Byahi HC on the morning of January 7th, 2024, and were immediately referred

to Gisenyi DH for better management. Unfortunately, one of them (a 22-year-old male) passed away on the way to the hospital. As of 9/01/2024, the two admitted patients were showing improvement.

Interventions conducted:

- Isolation and management of cases at Gisenyi DH
- Cholera RDT performed and showed negative results;
- Active search for cases was ongoing
- Investigation to be conducted in the community

eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 01

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 01, the overall completeness and timeliness of disease surveillance data reporting in Rwanda was 99% and 97%, respectively. With regards to completeness of surveillance reports, almost all hospitals had a high completeness (>80%), except Rwanda Military Hospital and King Faysal hospital that did not report. For the timeliness, almost all hospitals had a high score, except 3 hospitals that had a low score: Rwanda Military Hospital, CARAES Ndera and King Faysal Hospital.

Notes: The health facility that did not have a high score for the completeness and 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.

Completeness		Timeliness	
Hospital catchment area	W01/2024	Hospital catchment area	W01/2024
Nyagatare	100	Nyagatare	93
Gatunda	100	Gatunda	100
Ngarama	100	Ngarama	100
Kiziguro	100	Kiziguro	100
Gahini	100	Gahini	100
Rwinkwavu	100	Rwinkwavu	100
Kibungo	100	Kibungo	94
Kirehe	100	Kirehe	100
Rwamagana	94	Rwamagana	83
Nyamata	100	Nyamata	100
Kinihira	100	Kinihira	100
Rutongo	100	Rutongo	100
Gatonde	100	Gatonde	100
Butaro	100	Butaro	100
Ruli	100	Ruli	100
Nemba	100	Nemba	100
Ruhengeri	100	Ruhengeri	94
Byumba	100	Byumba	100
CHUB	100	CHUB	100
Kabutare	100	Kabutare	95
Kabgayi	100	Kabgayi	100
Kibilizi	100	Kibilizi	100
Gakoma	100	Gakoma	83
Gitwe	100	Gitwe	100
Ruhango	100	Ruhango	100
Remera Rukoma	100	Remera Rukoma	100
Nyanza	100	Nyanza	95
Kigeme	100	Kigeme	100
Kaduha	100	Kaduha	100
Munini	100	Munini	100
Bushenge	100	Bushenge	100
Kibogora	100	Kibogora	100
Kibuye	100	Kibuye	100
Kirinda	100	Kirinda	100
Mugonero	100	Mugonero	100
Shyira	88	Shyira	88
Muhororo	100	Muhororo	100
Kabaya	100	Kabaya	100
Gihundwe	100	Gihundwe	100
Mibilizi	100	Mibilizi	100
Gisenyi	100	Gisenyi	94
Murunda	95	Murunda	95
CHUK	100	CHUK	100
Nyarugenge	89	Nyarugenge	89
Muhima	100	Muhima	100
RMH	0	RMH	0
Masaka	92	Masaka	92
Kigababaga	95	Kigababaga	80
Kacyiru	100	Kacyiru	100
KFH	0	KFH	0
Caraes Ndera	100	Caraes Ndera	0
Nyabikenke	100	Nyabikenke	100
Rwanda	99	Rwanda	97