



# WEEKLY EPIDEMIOLOGICAL BULLETIN

## WEEK 31- 2024

(29 July- 4 August 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.

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## KEY EPIDEMIOLOGICAL HIGHLIGHTS

### EPIDEMIOLOGICAL WEEK 31/2024

#### Event Based Surveillance (EBS) Highlights:

- **Alert from community:** no alert reported in this week
- **Alert from EIOS:** one alert

Africa CDC to Declare First-Ever Continental Health Emergency as Mpox Surges

#### ● Indicator Based Surveillance (IBS) Highlights:

- 408 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, chicken pox, Mpox, typhoid fever, bacterial meningitis, snake bite and foodborne illness.
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for the epi Week 31 revealed that non bloody diarrhea cases surpassed the epidemic thresholds.
- A total of 52 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Most of deaths were perinatal deaths and deaths of children under 5 years.

#### ● Outbreaks and events updates in week 31

- Foodborne illnesses outbreak reported in Rulindo and Gatsibo Districts
- Ongoing Mpox outbreak in Rwanda

#### ● Completeness and timeliness

In Epi Week 31, 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 31

**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

- **Alert from community:** no alert notified
- **Alert from EIOS:** 1 alert

#### **Africa CDC to Declare First-Ever Continental Health Emergency as Mpox Surges**

The Africa Centres for Disease Control and Prevention (Africa CDC) plans to declare mpox a public health emergency of continental concern next week, marking the first such declaration in the agency's history.

The decision follows a surge in mpox cases across Africa in 2024, matching 2023's total in just six months. Since January 2022, over 38,000 cases and 1,456 deaths have been reported. This year, 10 African Union states have recorded more than 14,000 cases and 450 deaths, with 2,750 confirmed — 160% higher than the same period in 2023. Recent outbreaks in Ivory Coast, Kenya and Uganda highlight the virus's expanding reach. Mpox infections in Burundi, Kenya, Rwanda and Uganda are the first on record in these countries.

"This declaration will increase coordination between Africa CDC and member states," Kaseya said, adding it would accelerate research and development of diagnostics and vaccines.

The move coincides with the World Health Organization considering a similar global declaration. WHO Director-General Tedros Adhanom Ghebreyesus said Wednesday an emergency committee would be convened "as soon as possible" to advise on whether the outbreak represents a public health emergency of international concern.

<https://healthpolicy-watch.news/africa-cdc-to-declare-first-ever-continental-health-emergency-as-mpox-surges/>

## 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 31

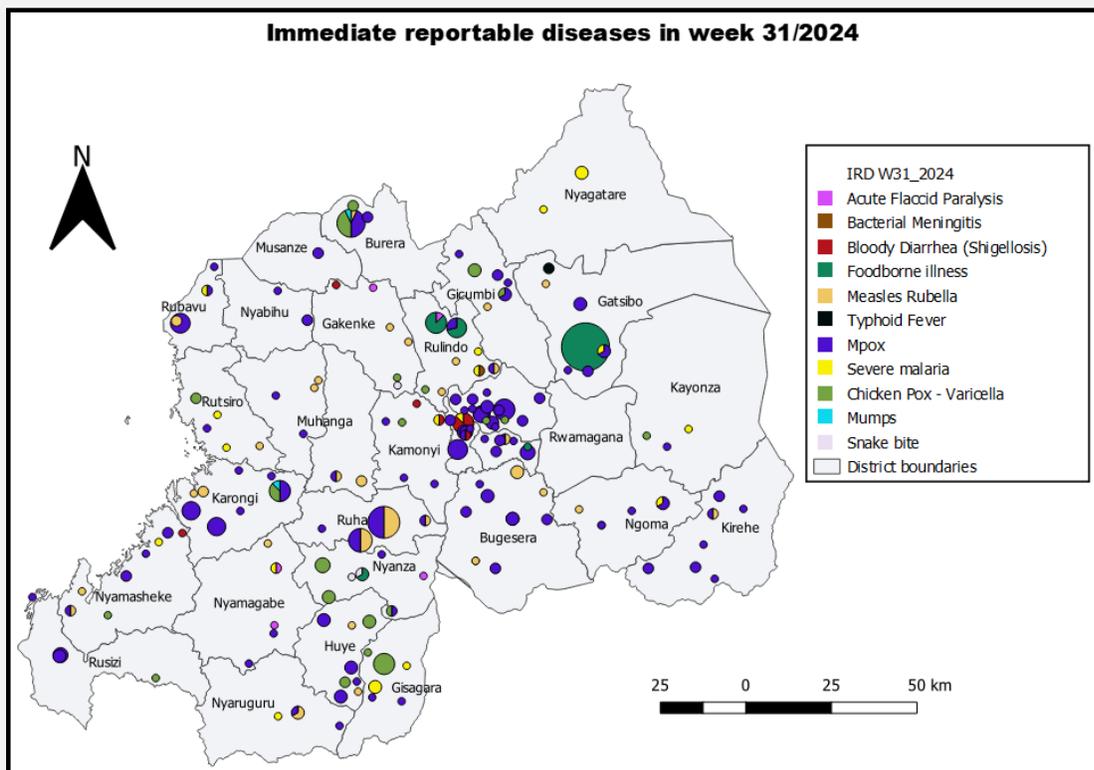
During this Epi week, 408 cases of immediate reportable diseases were notified:

- 48 cases of chicken pox were reported by 22 HFs. No HF crossed the threshold.
- 2 cases of mumps were reported by 2 HCs. No HF crossed the threshold.
- 12 suspected cases of bloody diarrhea (Shigellosis) were reported by 6 health facilities. The samples were taken and sent to NRL.
- 50 suspected cases of Measles/Rubella were reported by 32 HCs. Samples were taken and sent to NRL.
- 21 cases of severe malaria were reported by 17 health facilities.
- 5 suspected cases of acute flaccid paralysis were reported by 5 health facilities, the samples were taken and sent to NRL for transportation to UVRI laboratory.
- 2 suspected cases of typhoid fever reported by 1 health facility. The samples were taken and sent to NRL.
- 208 suspected cases of Mpox were reported by 99 health facilities they are described in outbreak section.
- 56 cases of foodborne illnesses were reported by 5 health facilities.
- 3 cases of snake bite were reported by 3 health facilities.
- 1 suspected case of Bacterial meningitis was reported by 1 health facility.

### Notes:

- ✓ All confirmed and suspected cases had been managed at the health facility level.
- ✓ The hospitals with surpassed thresholds are recommended to conduct the investigations.

### Geographical distribution of cases notified during the epi week 31/2024



Distribution of immediate reportable diseases in Epi week 31

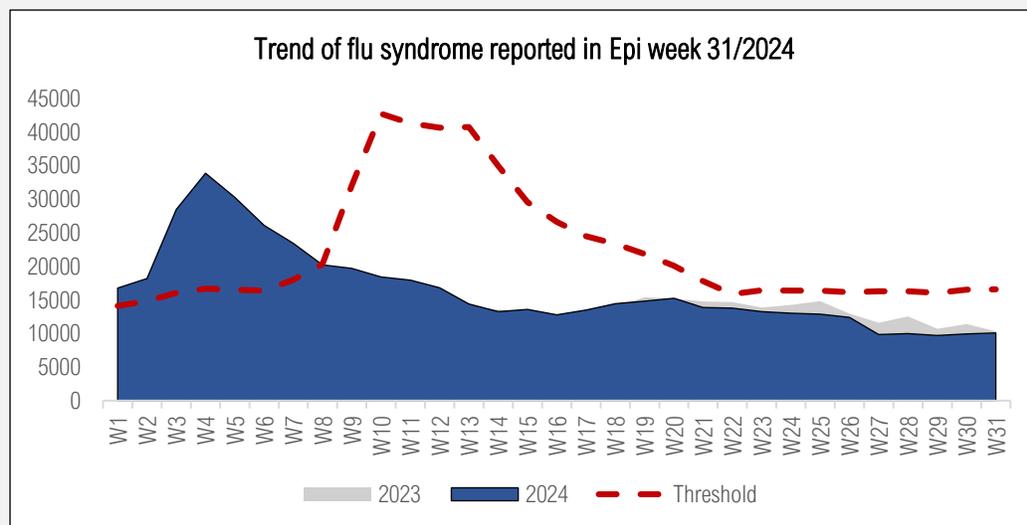
## B. WEEKLY REPORTABLE DISEASES – EPI WEEK 31

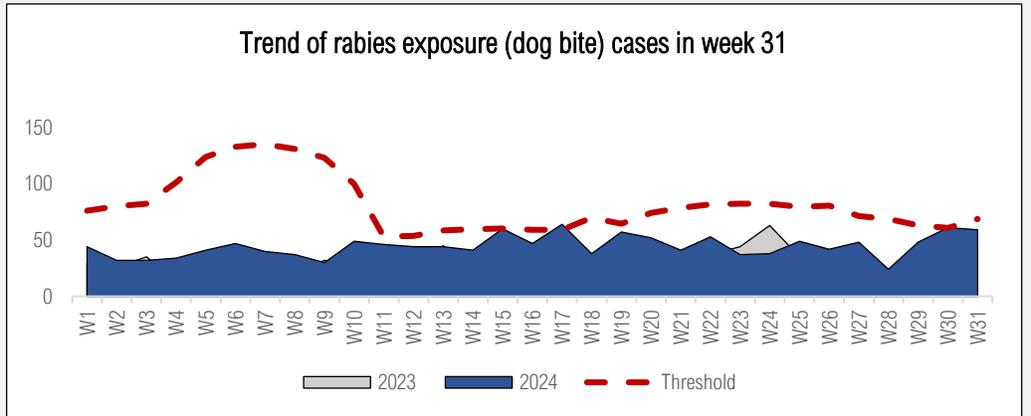
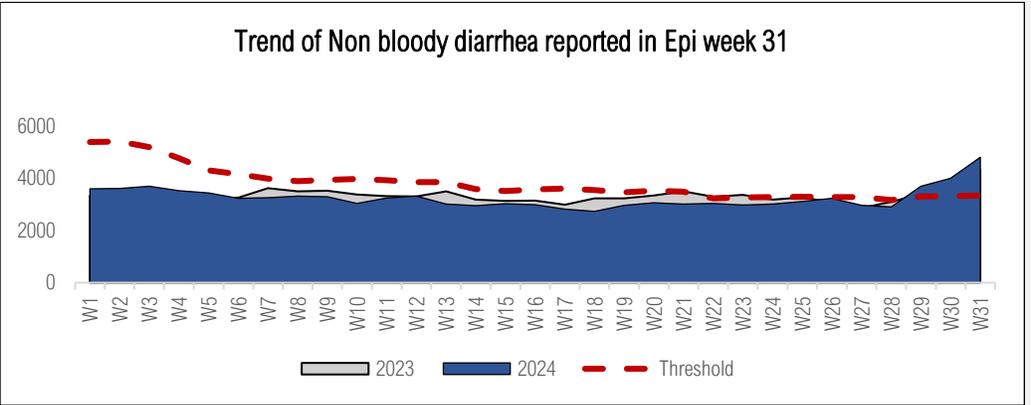
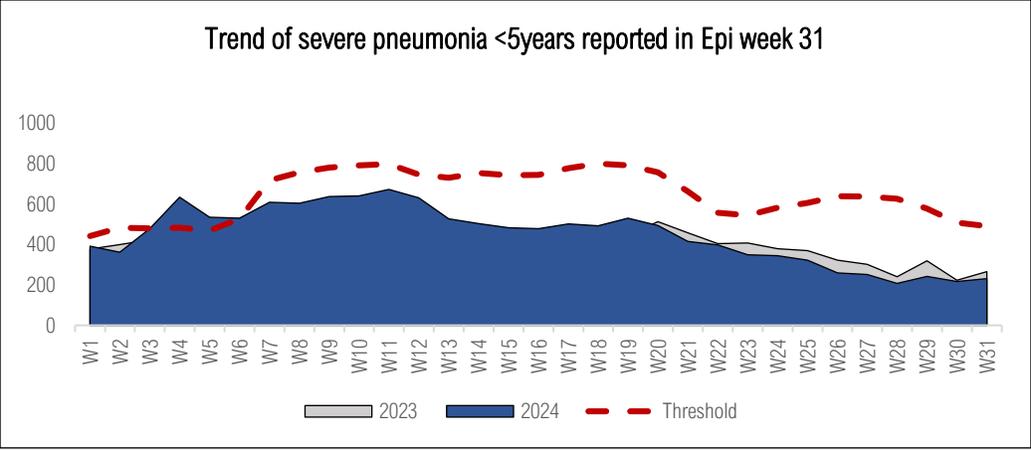
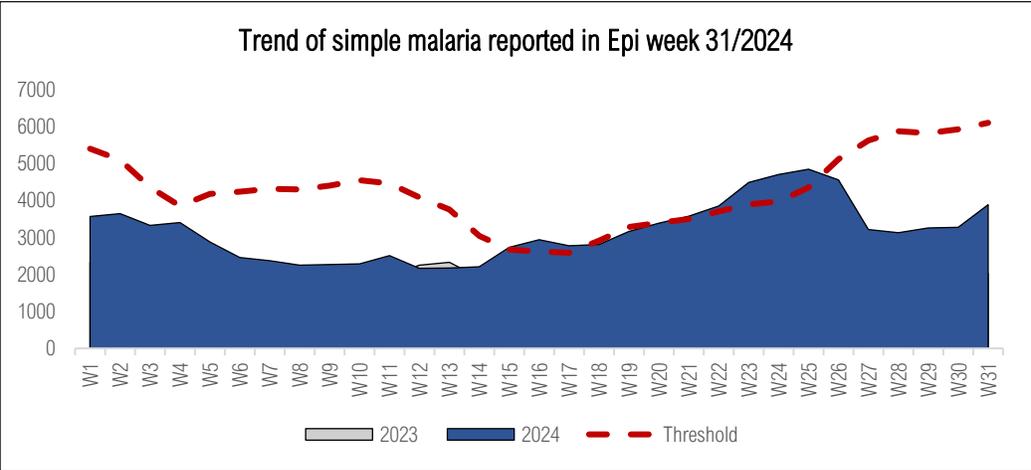
**Description:** In Rwanda, after the adaptation of the IDSR guidelines 3rd edition, eight diseases events are being reported and analyzed on a weekly basis. These include flu syndrome, simple malaria, severe pneumonia for under 5 years, non-bloody diarrhea for under 5 years, COVID-19, dog bites, brucellosis,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

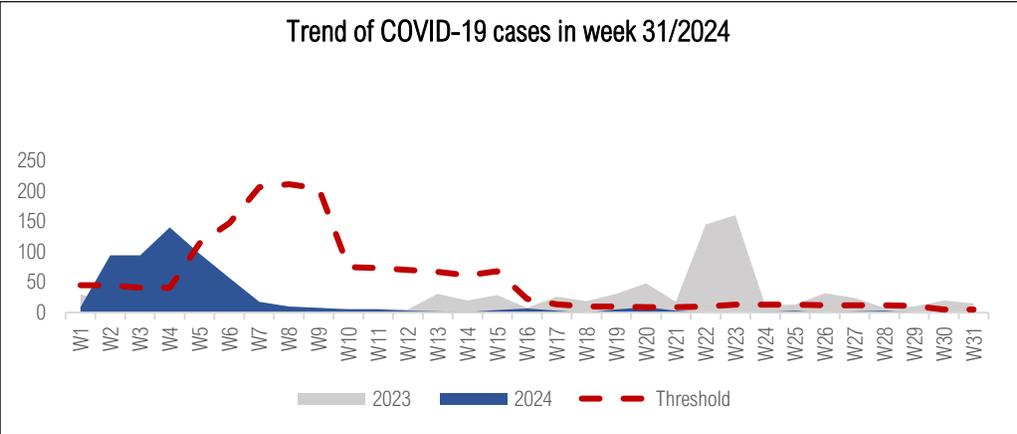
In Epi Week 31, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to their respective epidemic thresholds. The results of the analysis revealed that non bloody diarrhea cases surpassed the thresholds in some health facilities. including Byumba DH (Bushara HC, Byumba HC), Gakoma DH (Gakoma HC), Gatonde DH (Gatonde HC), Gatunda DH (Mimuri and Muhambo HCs), Kaduha DH (Kaduha DH and Kaduha HC), Kibagabaga DH, Kibilizi DH (Gisagara HC, Mugombwa HC), Kibogora DH (Karengera HC), Kibungo RH (Jarama HC, Nkanga HP, Rukoma-Sake HC, Rukumberi HC), Kibuye RH (Musango HC, Rufungo HC), Kigeme DH (Cyanika HC, Kigeme HC, Nyamagabe HC), Kinihira PH (Mushongi HC) Kirehe DH (Nyabitare HC, Nyarubuye HC ), Kirinda DH (Birambo HC), Kiziguro DH, Muhororo DH (Nyange B HC), Murunda DH (Mukura HC), Nemba DH (Nganzo HC), Ngarama DH (Ngarama DH, Camp Nyabiheke HC), Nyamata DH (Nyarugenge HC), Ruhango PH (Ruhango PH, Mbuye HC, Kigoma HC).

**NB:** Those district hospitals are recommended to conduct the investigation and reinforce preventive measures.

The figures below show the weekly reportable diseases trends:

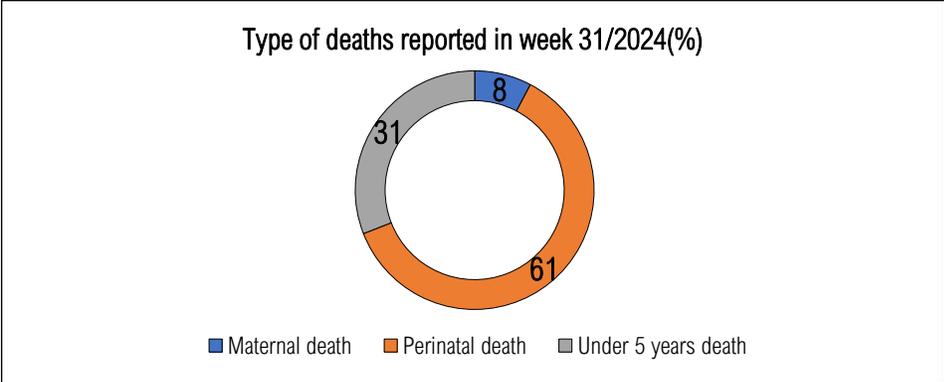






**C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 31**

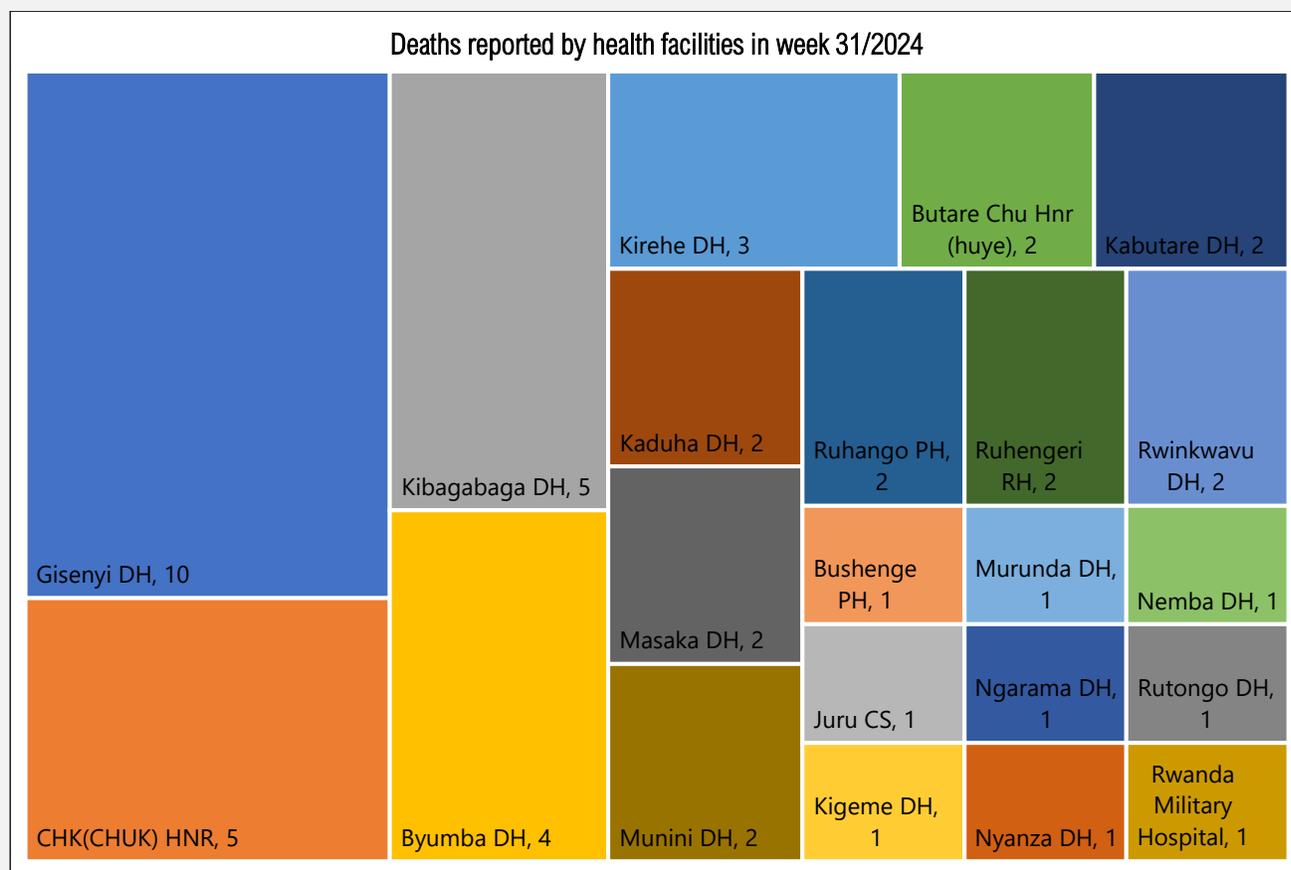
As summarized in the Pie Chart below, a total number of 52 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 32(61%) were perinatal deaths, 16 (31%) were the deaths of children under 5 years old (including 1 death due severe pneumonia), 4(8%) maternal death.



*Cause of deaths declared in epi week 31*

- 52 deaths were reported from various catchment areas as follow:
- 10 deaths were reported by Gisenyi DH (7 perinatal deaths and 3 under 5 years deaths)
  - 5 deaths were reported respectively by Kibagabaga DH (all were perinatal deaths), CHUK ( 2 maternal death, 2 perinatal deaths, 1 under 5 years death)
  - 4 deaths were reported by Byumba DH (all were perinatal deaths)
  - 3 deaths were reported by Kirehe DH (1 perinatal deaths and 2 under 5 years deaths)
  - 2 deaths were reported respectively by CHUB, Kabutare DH, Kaduha DH, Masaka DH, Ruhango PH, Rwinkwavu DH (each one reported 2 perinatal deaths), Munini DH (1 maternal death, 1 under 5 years death), Ruhengeri RH (1perinatal death and 1 under 5 years death)
  - 1death was reported respectively by Murunda DH (1 maternal death) Bushenge PH, Nyanza DH, Ngarama DH, Rutongo DH, Rwanda Military Hospital (each one reported 1perinatal death), Kigeme DH, Nemba DH, Juru HC in Nyamata DH (each one reported 1 under 5 years death).

## Distribution of deaths by health facilities:



*Distribution of deaths by health facilities in Epi week 31*

## OUTBREAK AND EVENT UPDATES IN EPIDEMIOLOGICAL WEEK 31

### 1. Foodborne illnesses outbreak in Gatsibo district, Kiziguro sector

Confirmed cases	0	Date reported:	August 4, 2024	Risk assessment	Low
Suspected cases	47	Source:	eIDSR		
Death(s)	0	District/HFs:	Gakenke HC/ Kiziguro DH		
Total cases	47	Geoscope:	Low		

#### Description

On 04/08/2024, Kiziguro DH was notified of a suspected Foodborne Illness outbreak by Gakenke HC. Patients from Gatsibo district, Kiziguro sector, Rubona cell, Akagarama village started arriving at the HC on the 04<sup>th</sup> evening with symptoms of abdominal cramps, profuse diarrhea, and vomiting following the consumption of non-alcoholic sorghum brew (umusururu) on Saturday the 03<sup>rd</sup> at a christening ceremony held in Akagarama village. An Rapid Response Team from Kiziguro DH was deployed to investigate and identify the source. A total of 47 individuals were consulted at Gakenke HC. 31 patients were discharged, 11 were transferred to Kiziguro DH for further treatment and 4 individuals were under observation at the HC. The probable cause was the consumption of contaminated traditional brew (umusururu).

#### Actions taken:

- Case management with ORS and antibiotics
- Active community case finding
- Stool samples were collected and sent to Kiziguro DH
- There was no sample of the brew available for analysis.

## 2. Foodborne illnesses outbreak in Rulindo District, Kinyihira sector

Confirmed cases	0	Date reported:	August 3, 2024	Risk assessment	Low
Suspected cases	7	Source:	eIDSR		
Death(s)	0	District/HFs:	Kinyihira HC/ Kinyihira PH		
Total cases	7	Geoscope:	Low		

#### Description

On 03/08/2024, Kinyihira HC received 7 patients (male: 3, Female: 4 and age ranging from 7 to 57) complaining of abdominal pain, vomiting and diarrhea after eating and drink ubushera at a traditional ceremony (Guhemba umubyeyi) they attended in Ndorandi Village, Butunzi cell, Kinyihira sector, Rulindo District. The attack rate was estimated at 7/30 (23.3%). All cases were stable and no deaths recorded

#### Action Taken:

- Case management as OPD with oral rehydration and Zinc.
- Four cases were referred at Kinyihira PH after Oral rehydration
- Case searching in the community was ongoing

## 3. Ongoing Mpox outbreak reported in Rwanda

Confirmed cases	2	Date reported:	July 20, 2024	Risk assessment	Low
Suspected cases	208	Source:	eIDSR		
Death(s)	0	District/HFs:	99 health facilities		
Total cases	210	Geoscope:	Moderate		

#### Description

-The first case of Mpox identified is a 33-year-old female trader from Bugarama Sector, Rusizi District. The patient's symptoms, which included skin rash and fever, first appeared on July 18, 2024. She was detected at a border crossing point with the Democratic Republic of Congo (DRC). Her initial medical consultation took place at Islamic Health Center on July 20, 2024, followed by isolation at Gihundwe Hospital on July 23, 2024. Laboratory analysis of a sample collected on July 23, 2024, confirmed Mpox infection the next day (July 24, 2024), with a CT value of 12.73. The patient's recent travel to the DRC, where an ongoing Mpox outbreak was reported, is considered the likely source of infection. Through contact tracing efforts, 4 individuals were identified as potential contacts.

-The second confirmed Mpox case in Rwanda was a 34-year-old male from Gasabo District, Kimironko Sector. His symptoms began on July 19, 2024, and he was detected at a health facility on July 23, 2024, four days after symptom onset. The patient had a skin rash, fever, sore throat, and swollen lymph nodes. He was examined and isolated at Kibagabaga Hospital on the day of detection. A sample collected on July 23, 2024, tested positive for Mpox on July 24, 2024, with a CT value of 17.05. The likely source of infection was reported as unprotected sexual contact with a Congolese individual while in the DRC, about a week before his symptoms started. Contact tracing identified 7 linked contacts.

As of Monday 5/08/2024, 208 suspected cases of Mpox had been reported in 99 health facilities and 4 confirmed cases

#### Action taken

- Case management
- Community sensitization on Mpox prevention

## eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 31

*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 31, the overall completeness and timeliness of disease surveillance data reporting in Rwanda, was scored to 99% and 97%, respectively. All hospitals had the high score (>80%) for the completeness. For the timeliness, almost all hospitals had a high score, except Rwamagana PH catchment area that had a moderate score; Kacyiru police hospital and King Faysal hospital that had a low score.

**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 shown in the figures below.

Hospital catchment area	Completeness																															
	W01	W02	W03	W04	W05	W06	W07	W08	W09	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21	W22	W23	W24	W25	W26	W27	W28	W29	W30	W31	
Nyagatare	100	100	100	100	100	100	100	100	100	100	93	100	86	100	93	100	100	100	100	93	100	93	100	93	100	100	100	93	100	100	100	100
Gatunda	100	100	100	100	100	100	100	100	100	100	89	100	67	100	100	100	100	89	100	100	100	100	89	100	100	100	100	100	100	100	100	
Ngarama	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Kiziguro	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Gahini	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	89	100	100	100	100		
Rwinkwavu	100	100	100	100	100	100	100	100	100	100	100	100	88	100	100	100	100	100	100	100	100	100	100	100	100	100	100	70	100	90	100	
Kibungo	100	100	100	100	100	100	100	100	100	100	94	100	94	100	100	100	100	100	100	94	100	100	100	100	100	100	94	100	100	100	100	
Kirehe	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	95	100	100	100	100		
Rwamagana	94	94	100	100	94	94	100	100	100	100	89	100	94	100	100	100	100	100	100	100	100	100	94	100	100	100	100	100	100	100	100	
Nyamata	100	88	100	100	94	94	100	100	100	100	94	94	76	94	88	100	100	94	88	88	88	94	88	82	88	94	100	94	100	100		
Kinshira	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	89	100	100	100	89	100	89	100	100	100		
Rutongo	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Gatonde	100	100	100	100	100	100	100	100	100	100	100	100	71	100	100	100	100	100	100	100	100	86	100	100	100	100	100	100	100	100		
Butaro	100	100	100	100	100	100	100	100	100	100	100	100	85	100	100	100	100	100	100	100	95	100	100	100	95	100	100	85	100	100		
Ruli	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Nemba	100	100	100	100	100	100	100	100	100	100	100	100	90	100	100	100	100	90	100	100	100	100	100	100	100	100	100	100	100	100	100	
Ruhengeri	100	100	100	94	89	89	100	100	100	100	89	100	94	100	100	100	100	100	100	94	94	100	94	100	94	100	100	100	94	100	100	
Byumba	100	100	100	100	100	100	100	100	96	100	96	100	100	100	96	100	96	100	96	100	96	96	100	100	100	96	85	96	92	96	96	
CHUB	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Kabutare	100	100	100	100	95	100	89	100	95	100	95	100	89	100	100	100	100	100	100	100	100	100	100	100	95	100	100	100	95	100	100	
Kabgayi	100	100	100	100	100	100	100	100	100	100	100	100	85	100	100	100	100	100	100	100	100	100	100	92	100	100	100	92	100	100	100	
Kibilizi	100	100	100	100	100	100	100	100	100	100	91	100	100	100	100	91	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Gakoma	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Gitwe	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	89	100	100	100	100	100	100	100	100	100	100	100	
Ruhango	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	88	100	100	100	100	
Remera																																
Rukoma	100	100	100	100	100	100	100	93	93	100	93	100	80	100	93	100	100	100	100	100	100	100	93	100	100	100	100	100	100	100	100	
Nyanza	100	95	95	95	100	100	100	100	100	100	100	100	100	100	100	100	100	95	100	100	95	100	89	100	100	100	100	100	100	100	100	
Kigeme	100	100	100	100	100	100	100	100	92	100	100	100	100	100	100	100	100	100	100	100	100	100	100	92	100	100	100	92	100	100	100	
Kaduha	100	100	100	100	100	100	100	100	100	100	80	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Munini	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Bushenge	100	100	100	100	88	100	100	88	100	100	88	100	88	100	100	100	100	100	100	100	100	100	100	100	100	88	100	100	100	100	100	
Kibogora	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	93	100	100	100	100	100	100	100	100	100	100	93	100	100	
Kibuye	100	100	100	100	100	100	100	100	100	100	92	100	100	100	100	100	100	100	100	100	100	100	100	92	100	100	100	100	100	100	100	100
Kirinda	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mugonero	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	71	100	
Shyira	88	100	100	100	88	100	100	100	100	100	100	94	88	100	100	100	100	94	100	100	94	94	100	100	100	100	100	100	100	88	100	
Muhororo	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Kabaya	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Gihundwe	100	100	100	100	80	100	100	90	100	100	100	100	100	100	90	100	100	100	90	100	100	100	100	100	100	100	100	100	90	100	100	
Mibilizi	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Gisenyi	100	100	100	100	100	88	100	100	100	100	94	100	100	100	94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Murunda	95	100	100	100	100	95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	95	100	100	95	100	100	100	100	100	100	95	100
CHUK	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nyarugenge	89	100	100	100	100	100	100	100	100	100	100	100	78	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Muhima	100	100	100	100	100	100	100	100	100	100	100	100	50	100	100	100	100	100	100	100	100	75	100	100	100	100	100	100	100	100	100	100
RMH	0	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100	100
Masaka	92	100	100	100																												

Hospital catchment area	Timeliness																															
	W01	W02	W03	W04	W05	W06	W07	W08	W09	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21	W22	W23	W24	W25	W26	W27	W28	W29	W30	W31	
Nyagatare	93	93	100	100	100	93	100	93	100	100	93	86	86	86	86	100	100	79	93	86	100	93	100	71	100	100	93	86	93	93	100	
Gatunda	100	100	100	100	100	100	100	100	100	89	89	100	67	89	100	89	100	89	100	100	100	89	89	100	100	100	100	89	89	100	100	
Ngarama	100	100	100	100	100	100	100	100	100	100	100	88	100	100	100	88	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Kiziguro	100	100	100	100	92	100	100	100	100	100	100	100	100	100	100	100	100	92	100	100	100	100	85	100	100	100	100	100	100	100	100	
Gahini	100	100	100	100	100	100	100	89	100	100	100	89	100	100	100	89	89	100	100	100	100	100	78	100	100	100	71	100	86	100		
Rwinkwavu	100	88	100	100	88	100	100	100	100	100	100	100	50	88	88	63	100	100	100	63	100	100	100	75	88	88	100	60	100	90	100	
Kibungo	94	100	100	100	100	100	100	100	100	94	94	94	94	100	94	94	94	100	94	100	94	88	100	100	100	100	94	94	100	100	94	
Kirehe	100	100	100	100	90	100	100	100	100	100	100	95	95	90	100	100	95	100	100	95	100	100	100	95	100	100	90	95	95	100	95	
Rwamagana	83	100	100	94	89	83	94	100	100	94	89	100	83	83	83	100	100	100	83	83	94	100	94	89	94	94	89	61	100	100	78	
Nyamata	100	100	100	88	94	94	94	94	88	94	94	100	71	94	76	100	100	88	82	82	88	88	88	65	76	76	76	65	94	94	94	
Kinshira	100	89	89	100	100	100	100	100	100	100	100	100	89	89	89	100	78	100	100	100	89	100	100	100	89	89	100	89	100	100	100	
Rutongo	100	100	87	100	100	100	100	100	100	100	100	100	100	100	100	100	100	93	100	93	100	100	100	100	100	100	100	100	100	100	100	
Gatonde	100	100	100	100	100	100	86	100	100	100	100	100	71	100	100	100	100	100	100	100	86	86	86	86	100	100	100	75	100	100	100	
Butaro	100	95	95	100	90	100	100	100	100	90	100	90	85	90	80	85	95	95	90	100	100	100	80	95	95	90	100	90	95	100	100	
Ruli	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	89	100	100	100	100	100	100	100	100	100	100	100	100	
Nemba	100	100	100	100	100	90	100	100	100	80	100	100	90	100	100	100	90	100	100	100	100	100	100	80	100	100	100	100	100	100	100	
Ruhengeri	94	94	100	94	89	89	100	100	100	100	89	100	94	100	100	94	100	94	100	94	100	94	100	83	83	100	100	94	94	100	94	
Byumba	100	100	100	100	100	100	100	100	96	100	96	100	100	100	96	96	96	100	100	96	100	92	100	100	100	100	95	96	88	92	96	
CHUB	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Kabutare	95	100	95	100	95	100	89	100	95	100	95	100	89	95	100	100	95	100	95	95	100	89	100	95	95	100	95	95	95	95	89	
Kabgayi	100	100	92	100	100	100	85	92	100	92	100	77	77	92	100	100	85	100	100	100	100	92	92	92	100	100	92	85	100	100	100	
Kibilizi	100	91	100	100	91	100	100	100	100	100	91	91	100	100	100	91	100	100	91	82	100	91	100	100	100	100	100	100	100	100	91	100
Gakoma	83	100	100	100	83	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	83	
Gitwe	100	100	89	100	78	78	100	100	78	100	100	100	89	89	100	100	100	89	100	67	100	100	100	89	100	100	100	89	100	100	100	
Ruhango	100	88	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	88	100	100	100	88	100	100	100	88	100	100	100	
Remera																																
Rukoma	100	100	100	93	93	93	100	93	100	100	93	100	73	100	93	100	100	100	93	100	100	80	87	100	100	100	100	93	100	100	100	
Nyanza	95	95	100	100	89	95	95	95	95	89	100	100	100	100	89	100	100	89	100	100	95	95	89	79	95	95	100	100	100	95	100	
Kigeme	100	100	100	100	100	100	100	100	92	100	100	100	92	100	100	100	100	100	100	92	92	100	100	85	100	100	100	92	100	92	92	
Kaduha	100	90	100	100	100	100	90	90	100	80	91	100	100	100	90	100	100	100	100	100	90	90	100	100	90	90	100	100	100	100	90	
Munini	100	100	100	100	100	88	94	100	100	100	100	100	100	100	94	88	100	100	100	100	100	88	100	100	100	100	100	100	100	100	100	
Bushenge	100	100	88	100	88	100	88	88	100	100	88	100	100	75	100	100	100	88	100	75	100	100	100	100	100	100	100	88	88	100	100	
Kibogora	100	100	100	93	100	100	100	100	100	100	100	100	100	100	100	100	100	93	100	100	100	100	100	100	100	100	100	100	86	93	100	
Kibuye	100	100	100	100	100	92	92	100	100	100	92	100	100	85	100	92	100	100	100	100	100	100	85	100	100	100	100	100	100	100	100	
Kirinda	100	100	100	100	100	83	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Mugonero	100	100	100	100	86	100	100	100	86	100	100	100	100	100	100	100	100	100	100	100	86	100	100	100	100	100	100	100	100	71	100	
Shyira	88	100	100	100	88	100	100	100	100	100	100	94	88	94	100	88	94	94	100	100	88	94	94	100	100	100	88	100	82	100	100	
Muhororo	100	100	90	100	100	100	100	100	100	80	100	100	100	90	90	100	100	90	100	100	100	100	100	90	100	100	90	80	100	90	90	
Kabaya	100	100	86	100	100	86	100	86	100	100	100	71	100	100	86	100	100	100	100	100	100	100	100	100	100	100	71	100	100	100	100	
Gihundwe	100	100	100	100	70	100	100	90	100	100	100	100	90	80	100	90	90	90	90	90	100	90	90	90	100	100	90	100	90	100	100	
Mibilizi	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Gisenyi	94	100	100	94	100	88	100	100	100	100	94	100	100	100	88	100	100	94	100	94	100	100	88	94	100	88	94	88	100	100		
Murunda	95	100	100	100	100	95	100	100	95	95	100	100	100	95	100	100	100	100	100	100	95	100	84	95	95	95	100	100	100	95	95	
CHUK	100	0	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Nyarugenge	89	89	89	100	100	100	100	100	100	100	100	89	67	100	100	100	100	100	100	89	100	100	100	100	100	100	100	67	100	100	100	
Muhima	100	100	100	100	100	100	100	100	75	100	100	100	50	100	100	75	100	100	100	100	100	75	75	100	100	100	75	100	100	100	100	
RMH	0	100	100	100	0	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100	
Masaka	92	100	100	100	100	100	100	100	100	100	100	100	100	100	92	100	92	100	100	100	100	100	92	92	100	100	100	100	100	92	100	
Kigababaga	80	95	100	85	100	70	90	95	80	85	90	85	70	65	100																	