



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 37– 2024

(9–15 September 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 37/2024

Event Based Surveillance (EBS) Highlights:

- **Alert from community: Nine-teen alerts:**

3 human illnesses 14 human deaths and 2 animal illnesses/deaths

- **Alert from EIOS: two alerts**

- Senegal Africa CDC Warns: Mpox Outbreak Still Uncontrolled
- MPOX in Burundi: more than 60% of under 19s affected

- **Indicator Based Surveillance (IBS) Highlights:**

- 523 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, bacterial meningitis, cholera, typhoid fever and foodborne illness.
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for the epi Week 37 revealed that malaria cases surpassed the epidemic thresholds.
- A total of 70 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 37**

- Rift valley fever (RVF) outbreaks in Ngoma District
- Weekly updates on ongoing Mpox outbreak in Rwanda

- **Completeness and timeliness**

In Epi Week 37, the overall completeness and timeliness of surveillance data reporting in Rwanda was 99% and 98% respectively.

WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 37

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.

- **Alert from community: Nine-teen alerts:**

3 human illnesses ,14 human deaths and 2 animal illnesses/deaths

- **Alert from EIOS: two alerts**

- **Senegal Africa CDC Warns: Mpox Outbreak Still Uncontrolled**

Summary: The Africa Centres for Disease Control and Prevention (Africa CDC) has highlighted the ongoing increase in mpox cases across multiple countries in Africa. The recent surge, declared a public health emergency, is stressing already vulnerable health systems. Vaccination efforts have begun in some areas like Rwanda and the Democratic Republic of Congo. <https://www.devdiscourse.com/article/health/3092414-africa-cdc-warns-mpox-outbreak-still-uncontrolled>.

- **MPOX in Burundi: more than 60% of under 19s affected**

Burundi is facing worrying increase in cases of MPOX (Monkey pox), particularly affecting school children. Since the start of the school year, authorities have noted a significant increase in infections mainly among young people aged 5 to 19s. This situation represents a major challenge for health authorities, who are redoubling the efforts to contain the spread of the virus. Since the first case was detected in July 2024, the country has recorded 564 confirmed cases. Among them 62,9 % are in under 19 years of age. School children aged 5 to 19 years alone, account for 33% of the cases recorded. <https://ouaga24.com/mpox-au-burundi-plus-de-60-des-moins-de-19-ans-touchez/>

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.*

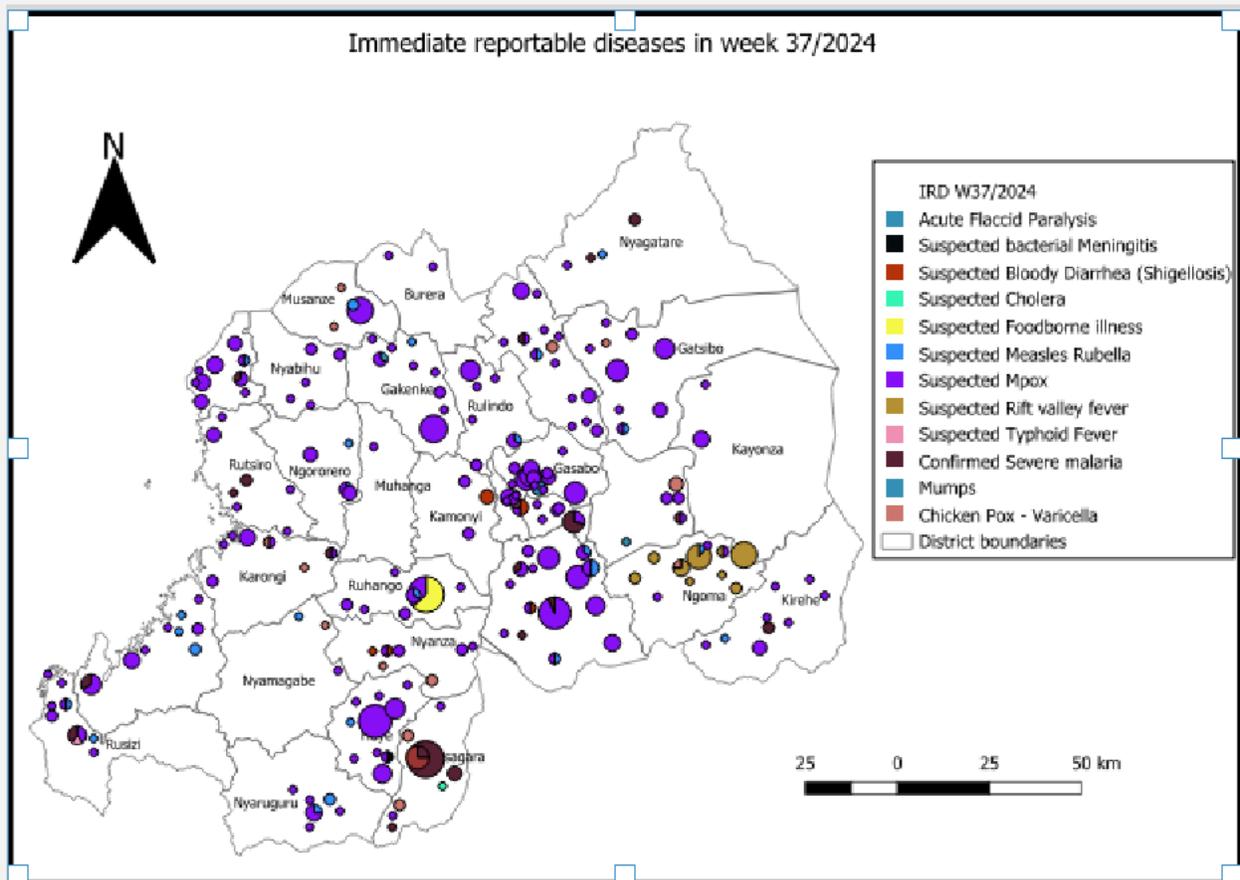
A. IMMEDIATE REPORTABLE DISEASES – EPI WEEK 37

During this Epi week, 523 cases of immediate reportable diseases were notified:

- 26 cases of chicken pox were reported by 15 HFs. No HF crossed the threshold.
- 3 cases of mumps were reported by 1 HC.

- 8 suspected cases of bloody diarrhea (Shigellosis) were reported by 5 health facilities. The samples were taken and sent to NRL.
- 28 suspected cases of Measles/Rubella were reported by 24 HCs. Samples were taken and sent to NRL.
- 51 cases of severe malaria were reported by 20 health facilities.
- 2 cases of acute flaccid paralysis were reported by 2 health facilities, the samples were taken and sent to NRL for transportation to UVRI laboratory.
- 1 suspected case of bacterial meningitis was reported by 1 health facility. The sample was tested negative.
- 360 suspected cases of Mpox were reported by 162 health facilities. They are described in outbreak section.
- 12 cases of foodborne illnesses were reported by 1 health facility, they were the cases of the previous week 36 reported in week 37.
- 1 suspected case of cholera was reported by 1 health facility, the sample was sent to NRL for testing, result is pending.
- **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 37/2024



Distribution of immediate reportable diseases in Epi week 37

A. WEEKLY REPORTABLE DISEASES – EPI WEEK 37

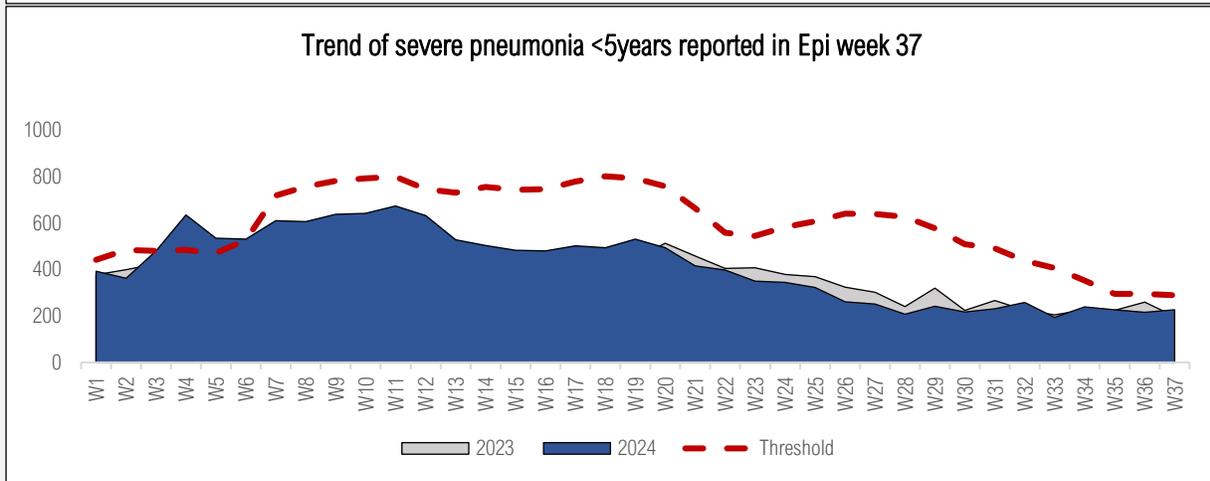
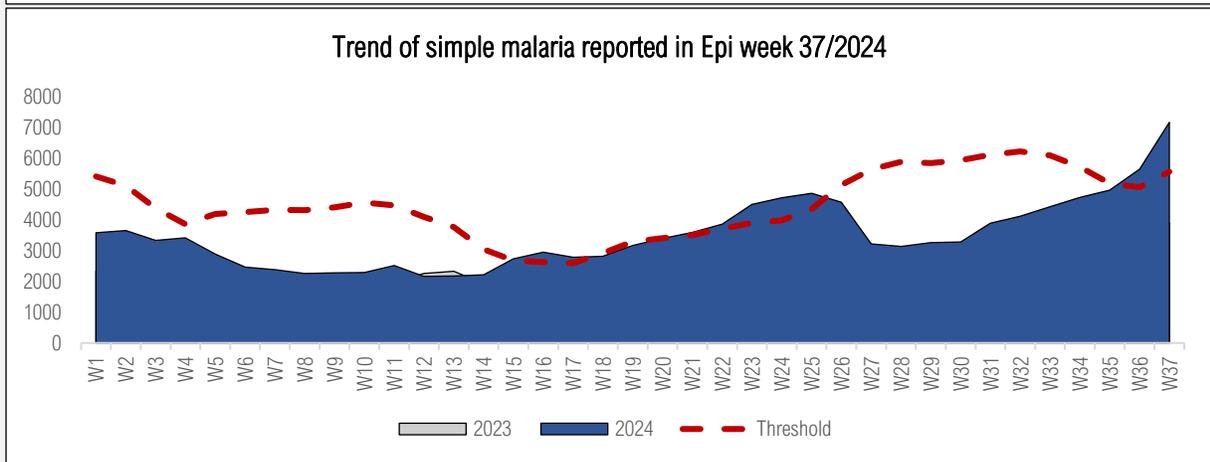
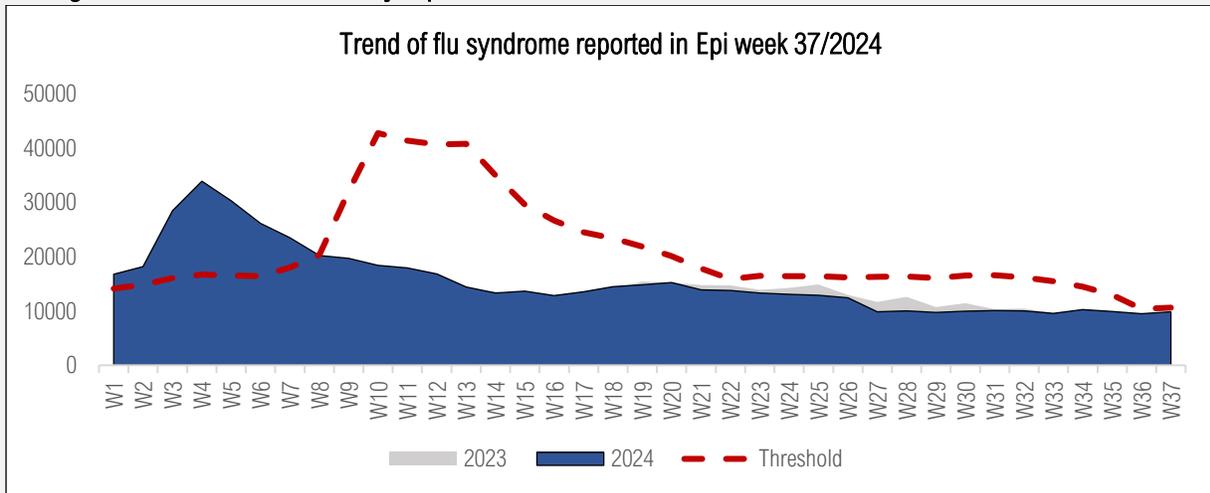
Description: *In Rwanda, after the adaptation of the IDSR guidelines 3rd edition, eight diseases events are being reported and analyzed on a weekly basis. These include flu syndrome, simple malaria, severe pneumonia for under 5 years, non-bloody diarrhea for under 5 years, COVID-19, dog bites, brucellosis,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

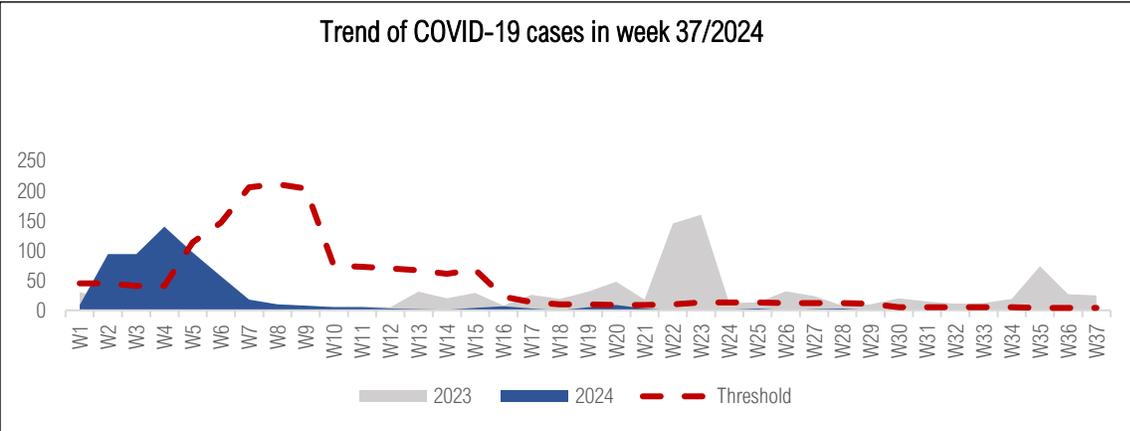
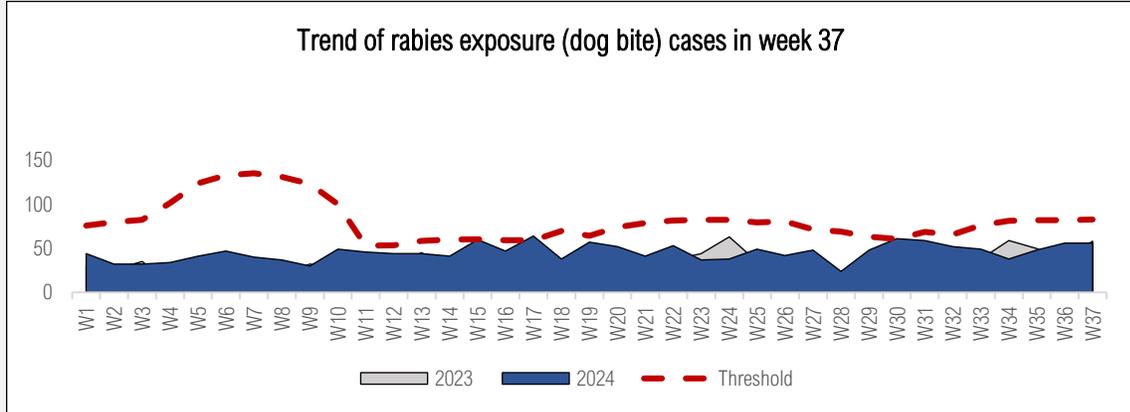
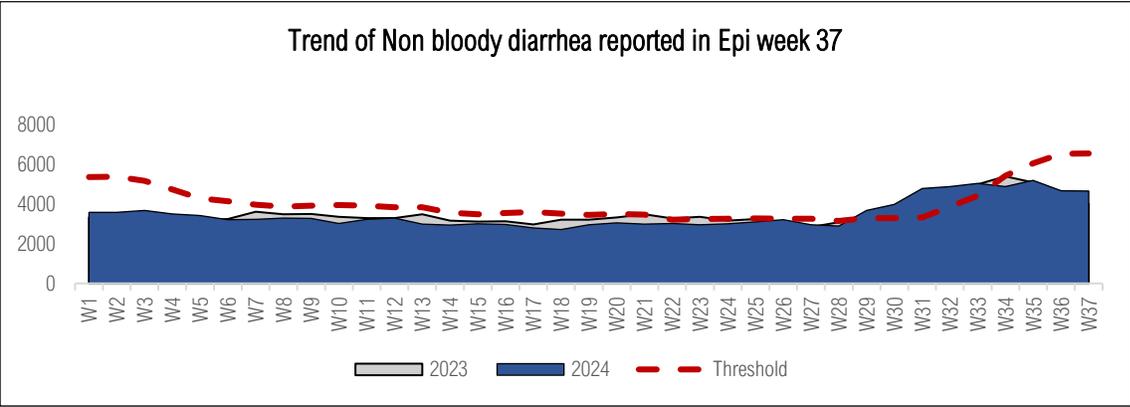
In Epi Week 37, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to their respective epidemic thresholds. The results of the analysis revealed malaria cases surpassed the thresholds, especially in following Health Facilities:

- Gakoma DH: Gakoma HC, Gishubi HC, Musha HC, Gikonko HC, Gakoma DH,
- Kibilizi DH: Kirarambogo HC, Kibayi HC, Gisagara HC, Kibilizi HC, Kigembe HC, Mugombwa HC, Mugombwa refugee camp,
- Kibogora DH: Gatare HC, Karengera HC, Kibingo HC, Kibogora HC, Hanika HC, Mahembe HC, Nyamasheke HC,
- Kirehe DH: Bukora HC, Kabuye HC, Gahara HC, Nasho HC, Rusumo HC,
- Nyamata DH: Nyamata HC, Gakurazo HC, Nzangwa HC, Nyarugenge HC, Ruhuha HC, Mayange HC, Ngeruka HC,
- Kibuye DH: Rubengera HC,
- Nyanza DH: Hanika HC, Kibilizi HC, Mututu HC, Ntyazo HC,
- Nyarugenge DH: Biryogo HC, Gitega HC, Mwendu HC,
- Bushenge PH: Gisakura HC, Mukoma HC, Muyange HC,
- Byumba DH: Muhondo HC, Tanda HC,
- Gahini DH: Buhabwa HC, Nyakabungo HC,
- Gihundwe DH: St Francois Rusizi HC,
- Kabgayi DH: Nyarusange HC,
- Kaduha DH: Jenda HC,
- Kibagabaga DH: Alpha&Omega dispensary, Bumbogo HC, Gatsata HC, Gihogwe HC, Gikomero HC, Hopital la Croix du Sud, Horebu medical clinic, Iramiro clinic, Isangano clinic, Kacyiru HC, Kagugu HC, Polyclinique familiale clinic, Remera HC, Rubungo HC, Rwanda women's network HC, Solace ministries HC,
- Masaka DH: Busanza DH, Dothan clinic, Gikondo HC, Gahanga HC, Kairos HC, Masaka HC, Nyarugunga HC,
- Muhima DH: Cor-unum HC, Kanyinya HC,
- Nyagatare DH: Bugaragara HC, Kagitumba HC, Karangazi HC, Matimba HC, Ndama HC, Ntoma HC, Tabagwe HC.

NB: the hospitals with malaria cases (see the list above) that surpassed the epidemic thresholds are recommended to conduct the investigation.

The figures below show the weekly reportable diseases trends:

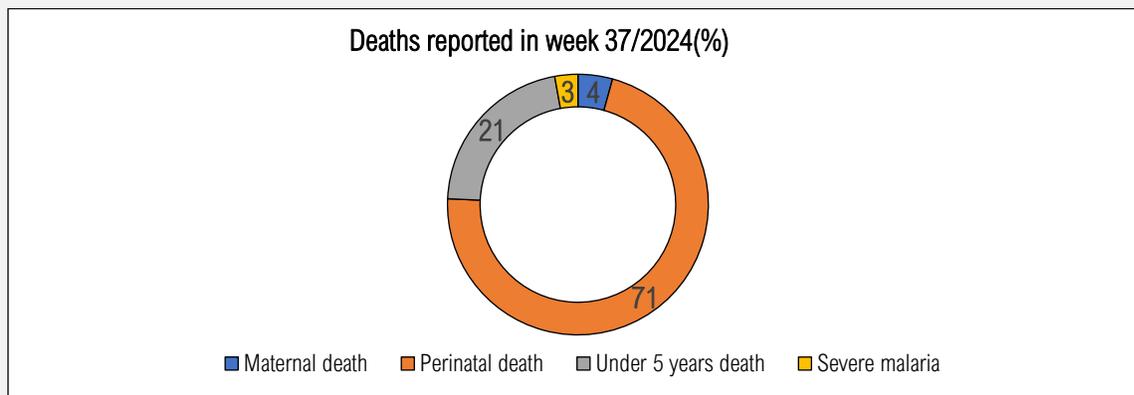




B. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 37

As summarized in the Pie Chart below, a total number of 70 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 50(71%) were perinatal deaths, 15 (21%) were the deaths of children under 5 years old (including 3 deaths due to severe pneumonia and 1 death due to non-bloody diarrhea), 3(4%) maternal deaths and 2(3%) deaths due to severe malaria.

Deaths reported in week 37/2024(%)

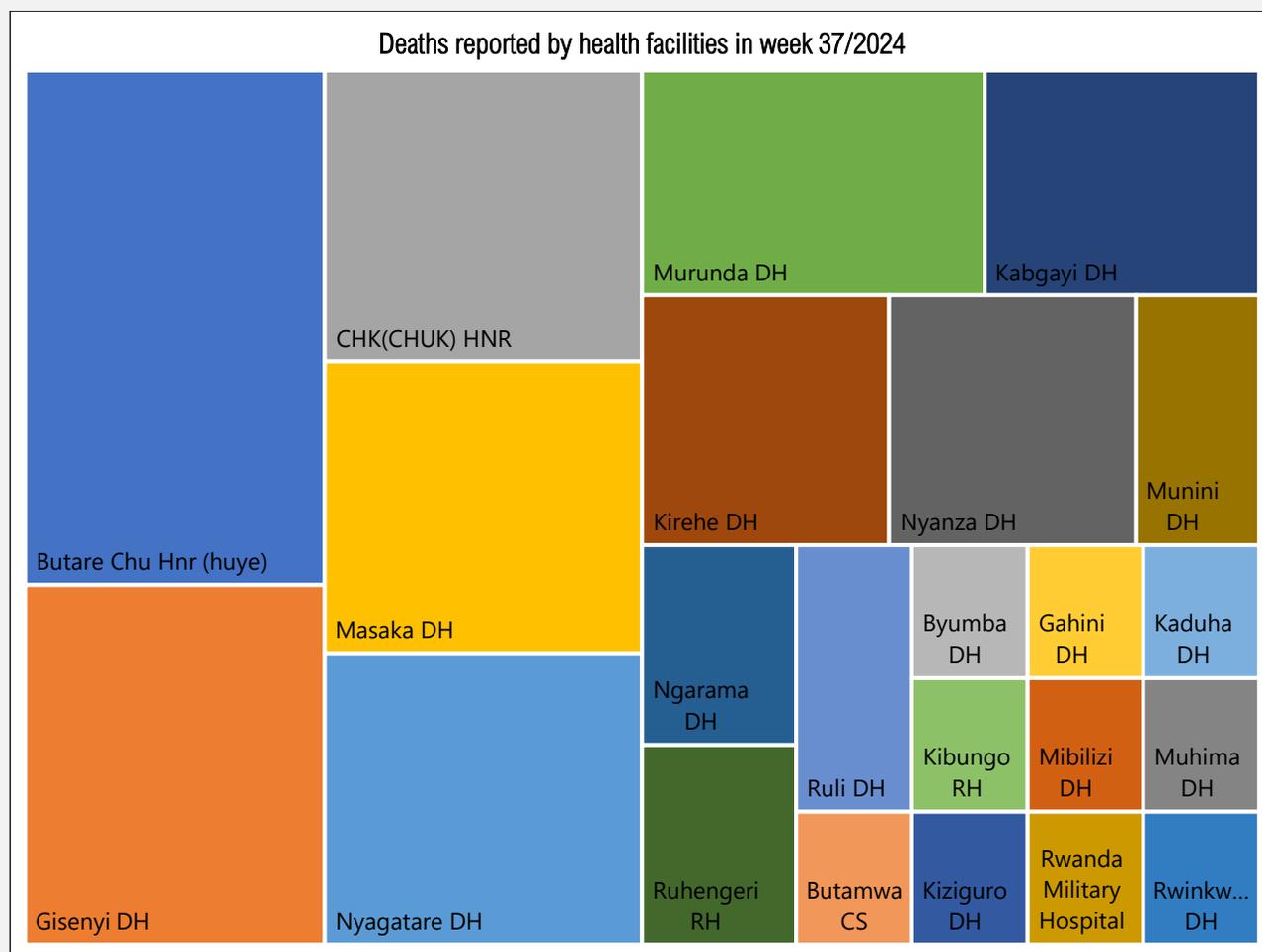


Cause of deaths declared in epi week 37

70 deaths were reported from various catchment areas as follow:

- 10 deaths were reported by CHUB (1maternal death, 6perinatal deaths and 3under 5 years deaths) and
- 7 deaths were reported by Gisenyi DH (6perinatal deaths and 1under 5 years death)
- 6 deaths were reported respectively by CHUK (2maternal deaths, 3 perinatal deaths and 1 under 5 years death); Nyagatare DH (6 perinatal deaths and 1 under 5 years death) and Masaka DH (all were perinata deaths)
- 5 deaths were reported by Murunda DH (3perinatal deaths and 1 under 5 years death and 1 death due to severe malaria)
- 4 deaths were reported respectively by Kirehe DH (3 perinatal deaths and 1 under 5 years death); Kabgayi DH (2perinatal deaths and 2 under 5 years deaths); Nyanza DH(all were perinatal deaths)
- 2 deaths were reported respectively by Munini DH, Ngarama DH, Ruhengeri RH (each one reported 2 perinatal deaths); Ruli DH (1perinatal death and 1 under 5 years death);
- 1death was reported respectively by Gahini DH, Byumba DH, Kaduha DH, Rwanda Military Hosptal, Rwinkwavu DH (each one reported 1perinatal death); Butamwa HC in Nyarugenege DH, Kibungo RH, Kiziguro DH (each one reported 1under 5 years death), Muhima DH (1under 5 years death due to severe pneumonia); Mibilizi DH (1death due to severe malaria).

Distribution of deaths by health facilities:



Distribution of deaths by health facilities in Epi week 37

OUTBREAK AND EVENT UPDATES IN EPIDEMIOLOGICAL WEEK 37

1. Rift Valley Fever outbreak in Ngoma District

Confirmed cases	0	Date reported:	August 22, 2024	Risk assessment	Low
Suspected cases	51	Source:	eIDSR		
Death(s)	0	District/HFs:	Ngoma/ Kibungo RH		
Total cases	51	Geoscope:	Low		

Description

on 22nd August 2024, the Rwanda Agriculture Animal Resources Development Board (RAB) reported cases of RVF in animals within the Ngoma district. This has raised concerns regarding the potential for economic loss, community anxiety, and spillover into the human population

As of 15th September 2024, the situation of RVF outbreak in Ngoma District is as follows:

- **Animal Cases:** Out of 2,446 animals tested, 19 were confirmed positive for RVF via PCR. These cases include: 10 cattle, 5 goats and 4 sheep. Confirmed cases are from 5 sectors of Ngoma District among others: Kazo, Mutendeli, Rurenge, Murama, and Rukira.
- **Human Contacts:** A total of 49 human contacts have been identified and placed under a six-day follow-up. Out of these, four individuals developed symptoms. However, all tested negative for RVF. Additionally, 52 samples were collected from health centers based on case definitions, leading to a total of 56 samples being tested, with all results returning negative for RVF.

Actions Taken:

1. **Incident Management System (IMS):** District command post has been activated and meetings are held three times a week to manage operation activities, monitor the outbreak control measures and the outbreak evolution. Investigations are conducted and situation reports are regularly shared.
2. **Laboratory Investigations:** Samples are continuously collected from both animals and humans for laboratory testing.
3. **Animal Vaccination:** Mass vaccination of animals in the affected areas has been carried out to curb the spread of RVF. A total of 70,867 animals vaccinated: 22,355 cows (65.3% coverage), 46,776 goats (72.4% coverage), and 1,736 sheep (95.9% coverage)
4. **Case Management:** Treatment is provided to symptomatic animals, especially those that tested positive for RVF. In addition, a slaughtering protocol have been established, and thus every animal intended for slaughter has to be sampled and tested for RVF. Only animals testing negative for PCR are cleared for consumption, and animals testing positive are treated rather than slaughtered.
5. **Community Awareness:** A total of 1,205 community Health Workers (CHWs) had been trained on RVF and are actively involved in event-based surveillance and reporting in both humans and animals.

2. Ongoing Mpox outbreak reported in Rwanda

Rwanda confirmed its first two cases of Mpox on July 24, 2024. As of epidemiological week 37, a total of 1,739 suspected cases have been reported, including 360 new suspected cases. A total of six cases have been confirmed through laboratory testing, including 2 confirmed cases of the week 37. These two cases were among the 397 individuals tested over the past 7 days. Among confirmed cases, five cases involving individuals with a history of international travel prior to symptom onset and one contact of a confirmed case. They received treatment, four cases have fully recovered and been discharged, while two new cases are currently isolated and receiving appropriate medical care and their contacts, who are asymptomatic, are under close follow-up.

Actions taken

In response to the Mpox outbreak, several key interventions are being implemented at the district level, where Incident Management System for Mpox was activated to enhance preparedness and strengthen response efforts. Key interventions undertaken include;

- Case management
- School-Based Screening and Awareness
- Door to Door Active Case Search
- Ring Vaccination

eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 37

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 37, the overall completeness and timeliness of disease surveillance data reporting in Rwanda, was scored to 99% and 98%, respectively. All hospitals had the high score (>80%) for the completeness that was to be appreciated. However, for the timeliness, almost all hospitals had the high score (>80%), except one hospital that had the low timeliness: King Faysal referral hospital and one with moderate score: Butaro DH.

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	W32	W33	W34	W35	W36	W37	
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	100	93	100	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	100	89	100	100	100	100	89	100	100	100	100	100	100	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	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	92	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	100	89	100	100	100	100	100	100	100	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	100	70	100	90	100	100	100	100	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	100	94	100	100	100	100	94	100	100	100	94	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	100	100	95	100	100	100	100	100	100	100	100	95	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	100	100	100	100	100	94	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	100	100	100	100	100	94	100	
Kinhihira	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	100	89	100	100	100	100	78	100	100	89	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	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	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	100	95	100	100	100	95	100	100	85	100	100	100	100	100	100	100	95	
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	100	100	100	100	100	100	
Nemba	100	100	100	100	100	100	100	100	100	100	100	100	90	100	100	100	100	100	90	100	100	100	100	100	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	100	94	100	100	100	100	94	100	100	94	94	100	100	94	100	
Byumba	100	100	100	100	100	100	100	100	96	100	96	100	100	100	96	100	96	100	100	96	96	100	100	100	100	96	85	96	92	96	96	96	100	100	100	100	100	
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	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	100	100	100	100	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	100	100	100	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	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	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	89	100	100	100	100	100	100	100	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	100	88	100	100	100	100	88	100	100	88	100	
Remera	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	100	100	100	100	100	100	
Rukoma	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	100	100	100	100	100	
Nyanza	100	95	95	95	100	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	100	100	100	100	95	
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	100	100	100	100	100	92	
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	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	100	100	100	100	94	100
Bushenge	100	100	100	100	88	100	88	100	88	100	88	100	88	100	88	100	100	100	100	100	100	100	100	100	100	88	100	100	100	100	100	100	100	100	100	100	100	100
Kibogora	100	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	93	100	100	100	100	100	100	86	100	
Kibuye	100	100	100	100	100	100	100	100	100	100	92	100	100	100	100	100	100	100	100	100	100	100	92	100	100	100	100	100	100	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	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	71	100	100	100	100	100	100	100	100	
Shyira	88	100	100	100	88	100	100	100	100	100	100	94	88	100	100	100	100	100	94	100	100	100	94	94	100	100	100	100	100	88	100	100	94	100	100	94		
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	100	100	100	100	90	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	100	100	100	100	100	100
Gihundwe	100	100	100	1																																		

