



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 09 – 2024

(26 February-03 March 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 09/2024

Event Based Surveillance (EBS) Highlights:

No alert from community was reported in week 9

Alerts identified through the Epidemic Intelligence from Open Source (EIOS): five alerts:

- An unknown disease kills dozens of children in Rubenga, Idjwi, DRC
- DRC: with more than 150 deaths, the case fatality rate due to Mpox has almost doubled in 2024.
- Conjunctivitis Epidemic in ANGOLA, (LUANDA)
- More than 2,300 cases of measles recorded in 2 months: Congo central
- Dengue in Yemen

Indicator Based Surveillance (IBS) Highlights:

- 137 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 and viral conjunctivitis
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for Epi Week 09 revealed that no disease surpassed the epidemic threshold
- A total of 75 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 09

Two outbreaks were reported:

1. Viral conjunctivitis in Kayonza district, Kayonza Vocational Training School
2. Ongoing outbreak of conjunctivitis at GS Rwankuba, a boarding school in Gakenke district.

Completeness and timeliness

In Epi Week 09, 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 09

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

No alert from community reported in week 9

MEDIA SCAN

Alert from EIOS: five alerts were detected:

- An unknown disease kills dozens of children in Rubenga, Idjwi, DRC

<https://flutrackers.com/forum/forum/africa/emerging-diseases-other-health-threats-ah/986418-drc-idjwi-an-unknown-disease-similar-to-malaria-kills-dozens-of-children-in-rubenga-media-report-february-28-2024#post986418>

- DRC: with more than 150 deaths, the case fatality rate due to Mpox has almost doubled in 2024.

<https://flutrackers.com/forum/forum/africa-ac/monkeypox/984668-drc-mpox-monkeypox-outbreak-2024#post986478>

- Conjunctivitis Epidemic in ANGOLA, (LUANDA)

<https://promedmail.org/promed-post/?place=8715154,12461#promedmailmap>

- More than 2,300 cases of measles recorded in 2 months: Congo central

<https://flutrackers.com/forum/forum/emerging-diseases-other-health-threats-alphabetical-a-thru-h/childhood-diseases/measles/984667-drc-measles-outbreak-2024#post986388>

- Dengue in Yemen

<https://fundacionio.com/dengue-en-yemen-2/>

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 09

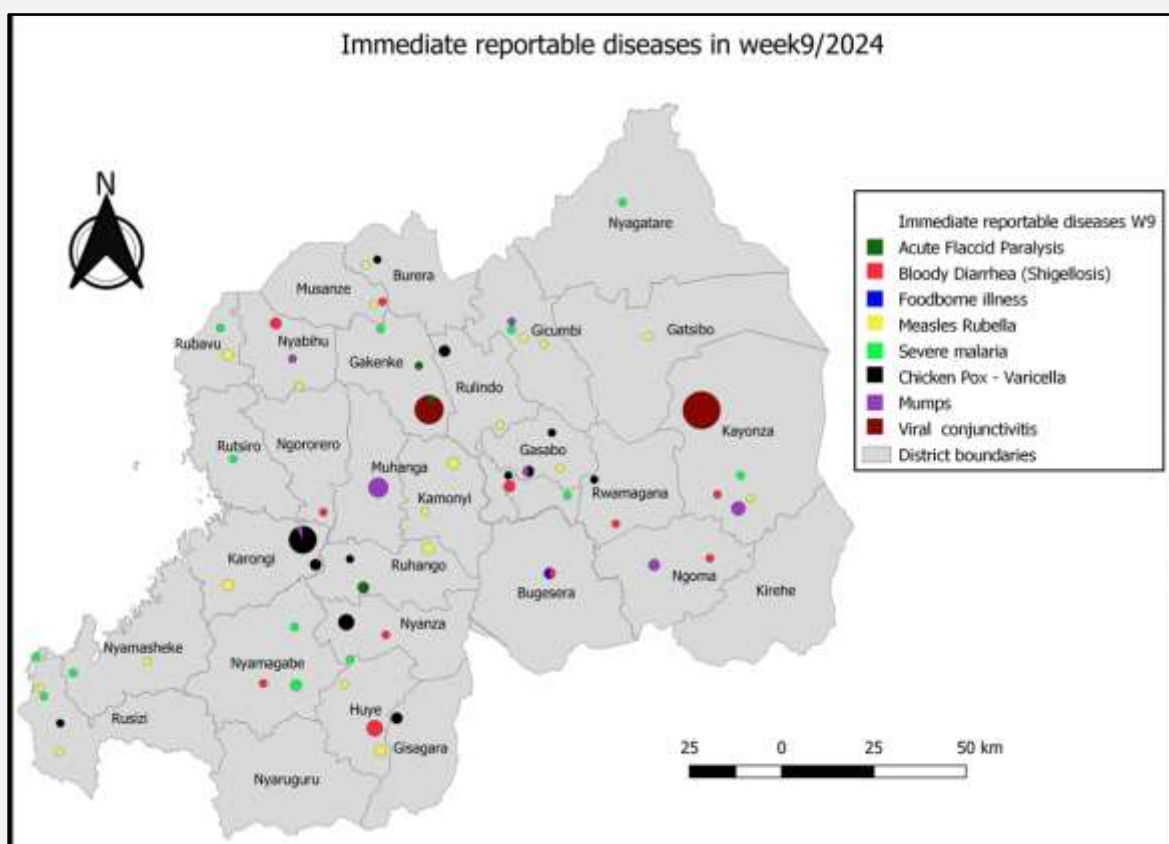
During this Epi week, 137 cases of immediate reportable diseases were notified:

- 28 cases of chicken pox were reported by 12 HFs. Birambo HC (in Kirinda DH) crossed the threshold.
- 15 cases of mumps were reported by 7 HCs. No HF crossed the threshold
- 16 suspected cases of bloody diarrhea (Shigellosis) were reported by 11 health facilities. The samples were taken and sent NRL. For the results of the samples of the previous week, all samples were tested negative for shigellosis and no other pathogens isolated
- 25 suspected cases of Measles/Rubella were reported by 20 HCs. The samples were taken and sent to NRL.
- 14 cases of severe malaria were reported by 13 health facilities
- 4 cases of acute flaccid paralysis were reported by 3 health facility, the samples were taken and sent to NRL for transportation to UVRI laboratory.
- 34 cases of viral conjunctivitis were unusually reported by 2 health facilities, the cases are described below in the section of outbreak and events update.

Notes:

- All confirmed and suspected cases had been managed at the health facility level.
- The hospitals that had the cases which crossed the thresholds are recommended to conduct the investigation.

Geographical distribution of cases:



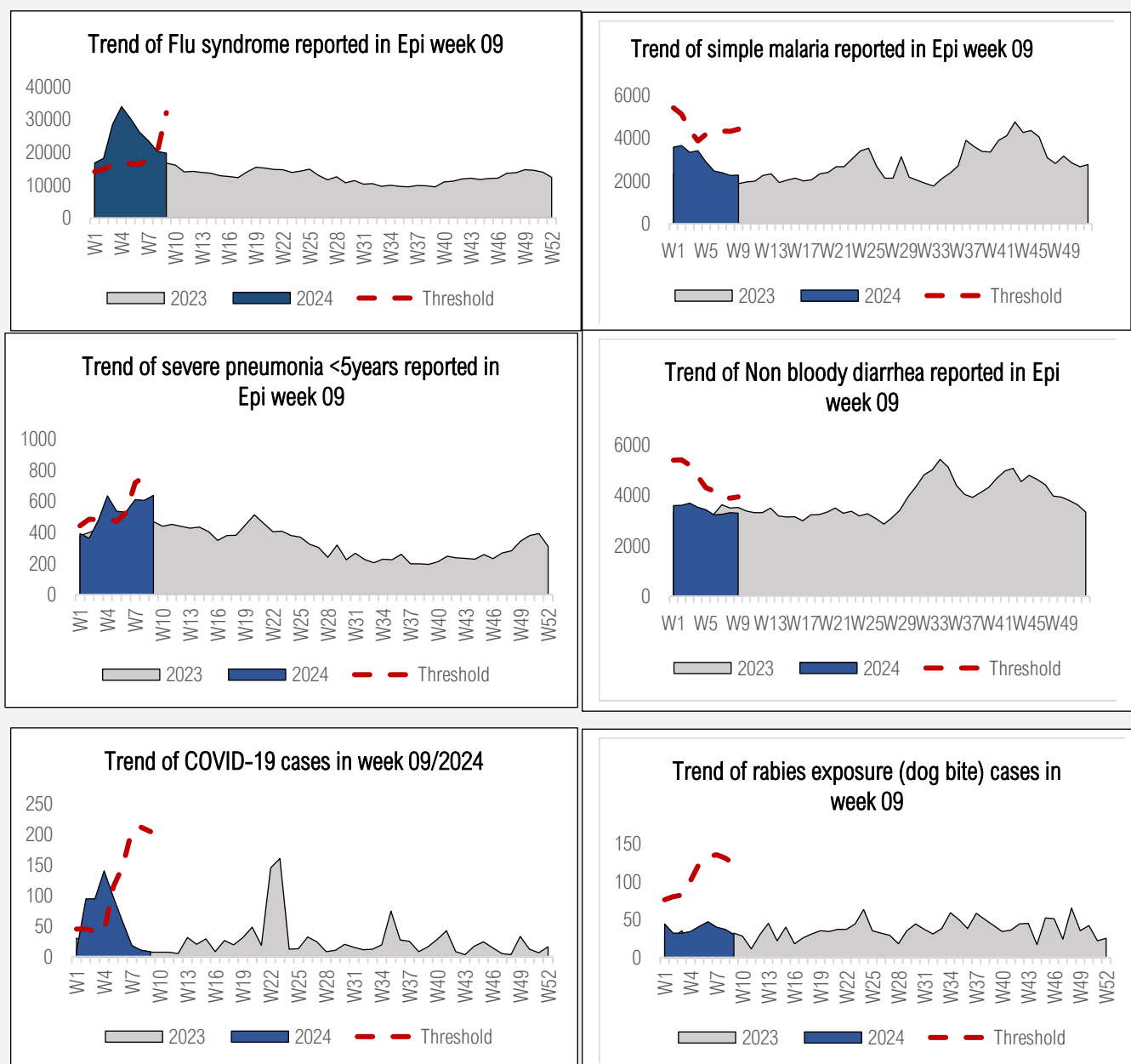
Distribution of immediate reportable diseases in Epi week 09

B. WEEKLY REPORTABLE DISEASES – EPI WEEK 09

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.

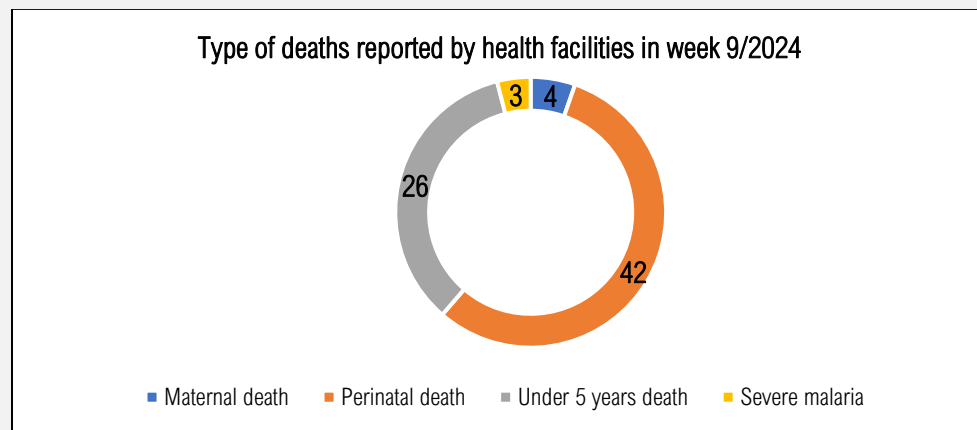
In Epi Week 9, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to their respective epidemic thresholds. The results of the analysis revealed that no disease crossed the epidemic thresholds.

The figures below show the weekly reportable diseases trends:



DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 09

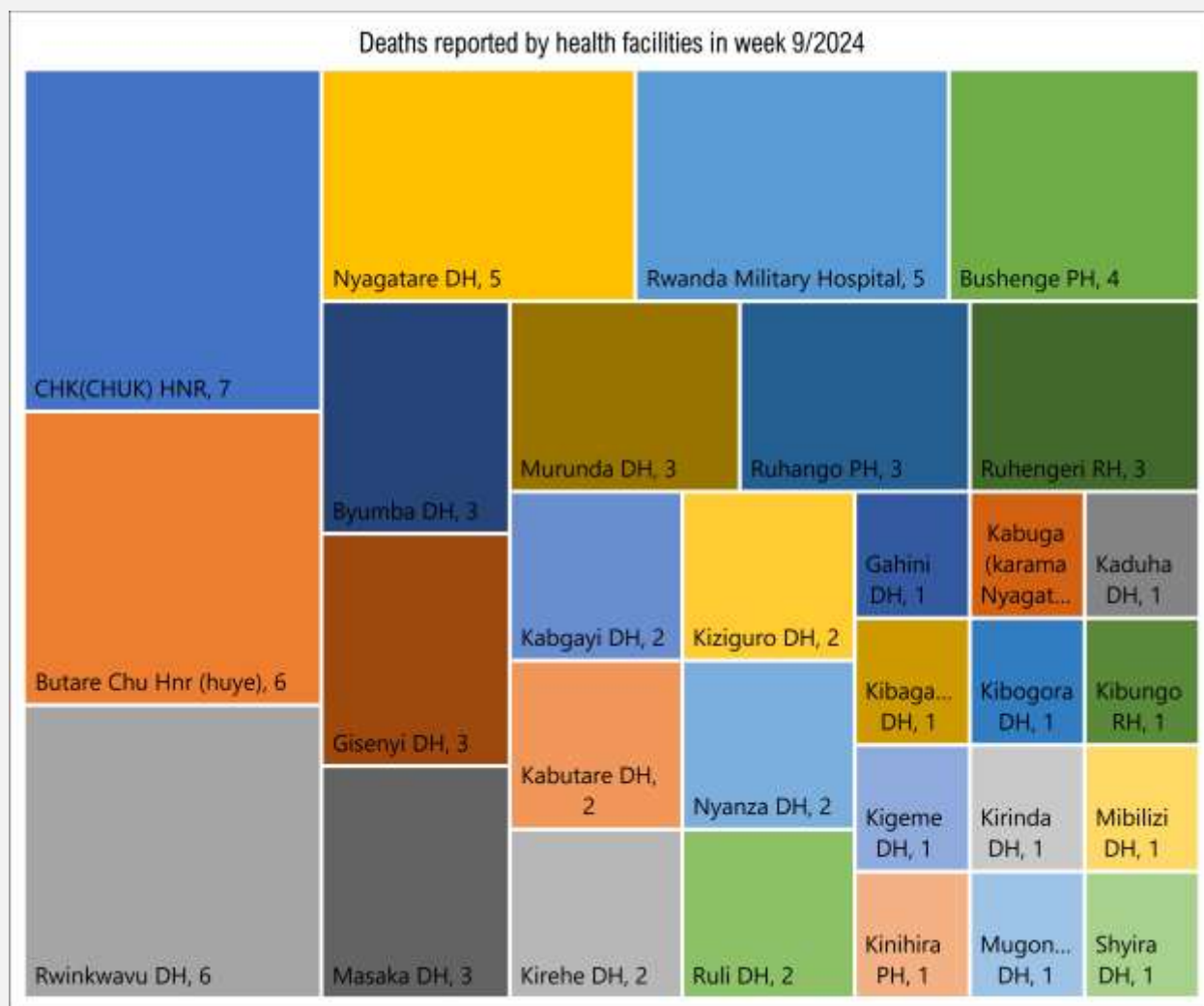
As summarized in the Pie Chart below, a total number of 75 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 42 (56%) were perinatal, 26 (35%) were the deaths of children under 5 years old, 3 (4%) deaths due to severe malaria, and 4 (5%) maternal deaths.



Cause of deaths declared in epi week 09

75 deaths were reported from various catchment areas as follow:

- 7 deaths were reported by CHUK (2 perinatal deaths ,4 under 5 years deaths and 1 maternal death)
- 6 deaths were reported respectively by CHUB (5 perinatal deaths and 1 maternal death) and Rwinkwavu DH (5 perinatal deaths ,1under 5 years death)
- 5 deaths were reported respectively by Nyagatare DH (5 perinatal deaths) and Rwanda Military Hospital (3 perinatal deaths and 2 under 5 years deaths)
- 4 deaths were reported by Bushenge PH (2 perinatal deaths and 2 under 5 years deaths)
- 3 deaths were reported respectively by Byumba DH (1 perinatal death, 2 under 5 years deaths); Gisenyi DH (2 were perinatal deaths and 1 under 5 years death); Masaka DH (2 perinatal death and 1 death due to severe malaria); Murunda DH (1 perinatal deaths, 1 under 5 years death, and 1 death due to severe malaria); Ruhango PH (1 perinatal death and 2 under 5 years deaths); Ruhengeri RH (2 perinatal deaths and 1 under 5 years death)
- 2 deaths were reported respectively by Kabgayi DH (1 maternal death); Kabutare DH (all were under 5 years deaths); Kirehe DH (1 perinatal deaths); Kiziguro DH, Nyanza DH and Ruli DH (each of them had 1 perinatal death and 1 under 5 years death);
- 1 death was reported respectively by Gahini DH, Kaduha DH, Kibagabaga DH, Kinihira DH, Kirinda DH and Mugonero DH (every health facility reported 1 perinatal death); the following health facilities reported 1 under 5 years death: Kibungo RH, Mibilizi DH, Kibogora DH, Shyira DH and Kabuga HC (in Karama-Nyagatare DH) and 1 death due to severe malaria was reported by Kigeme DH.



Distribution of deaths by health facilities in Epi week 09

OUTBREAK AND EVENT UPDATES IN EPIDEMIOLOGICAL WEEK 09

1. VIRAL CONJUNCTIVITIS SITUATION IN KAYONZA DISTRICT

Confirmed cases	0	Date reported:	February 18, 2024	Risk assessment	Low
Suspected cases	191	Source:	eIDSR		
Death(s)	0	District/HFs:	Rukumberu HC/Kibungo RH		
Total cases	191	Geoscope:	Low		

Outbreak description:

Since February 18, 2024, students from Kayonza Vocational Training School have been exhibiting symptoms consistent with adenovirus conjunctivitis. On Monday, February 19, 2024, a team of two Ophthalmic Clinical Officers (OCOs) was dispatched from Gahini Hospital to screen students for adenovirus conjunctivitis at Kayonza Vocational School to detect the new eye disease affecting students. They found 114 students. Two days later (on

February 21), an additional 77 students were identified, bringing the total to 191 affected students. Affected students were isolated within the school premises, and the outbreak was successfully contained. As of Monday 4 March 2024, no new cases have been reported. All cases were reported later in the eIDSR (week 9).

Actions Taken:

- The cases were managed at health center
- Recommendation to the HC for reporting timely the case detected

2. ONGOING OUTBREAK OF CONJUNCTIVITIS AT GAKENKE DISTRICT, RUSHASHI SECTOR, GS RWANKUBA

Confirmed cases	0	Date reported:	February 14, 2024	Risk assessment	Low
Suspected cases	149	Source:	eIDSR		
Death(s)	0	District/HFs:	Rwankuba HC/Ruli DH		
Total cases	149	Geoscope:	Low		

Outbreak description:

Since, February 14th, 2024, Rwankuba Health Center has received students from GS Rwankuba, a boarding school in Rushashi Sector, Gakenke District. All cases complained of acute red and itchy eyes, and discharge. Potential Index Case: A 17-year-old male, who returned from home (Kigali) on 11/02/2024 with eye complaints. His two sisters had similar symptoms for two days. They study at Kigali Parents' School and reside in Kicukiro, Nyarugunga, Kanombe, Gihanga. The class of the index case (S3B) is the most affected, with 6 out of 17 cases. Differential Diagnosis: Viral conjunctivitis, with bacterial superinfection. As of Monday 04/03/2024, Rwankuba HC reported 149 cases.

Actions Taken:

- Isolation and case management by Ruli District Hospital ophthalmology team, with ocular chloramphenicol and tetracycline
- Education about hand hygiene and avoiding handshaking
- Ruli District Hospital Rapid Response Team (RRT) conducted community education and set up isolation rooms at GS Rwankuba, managed by Rwankuba Health Center nursing staff.

eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 09

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 09, 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 one hospital that had a low score: CARAES Ndera. For the timeliness, many hospitals had a high timeliness (>80%), except two hospitals that had a moderate score (between 60 and 79%: Gitwe DH and Muhima DH and three hospitals that had a low score (below 60%): CARAES Ndera hospital, King Faysal RH and Kacyiru DH.

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	W01	W02	W03	W04	W05	W06	W07	W08	W09	Hospital catchment	W01	W02	W03	W04	W05	W06	W07	W08	W09
Nyagatare	100	100	100	100	100	100	100	100	100	Nyagatare	93	93	100	100	100	93	100	93	100
Gatunda	100	100	100	100	100	100	100	100	100	Gatunda	100	100	100	100	100	100	100	100	100
Ngarama	100	100	100	100	100	100	100	100	100	Ngarama	100	100	100	100	100	100	100	100	100
Kiziguro	100	100	100	100	100	100	100	100	100	Kiziguro	100	100	100	100	92	100	100	100	100
Gahini	100	100	100	100	100	100	100	100	100	Gahini	100	100	100	100	100	100	100	89	100
Rwinkwavu	100	100	100	100	100	100	100	100	100	Rwinkwavu	100	88	100	100	88	100	100	100	100
Kibungo	100	100	100	100	100	100	100	100	100	Kibungo	94	100	100	100	100	100	100	100	100
Kirehe	100	100	100	100	100	100	100	100	100	Kirehe	100	100	100	100	90	100	100	100	100
Rwamagana	94	94	100	100	94	94	100	100	100	Rwamagana	83	100	100	94	89	83	94	100	100
Nyamata	100	88	100	100	94	94	100	100	100	Nyamata	100	100	100	88	94	94	94	94	88
Kinihira	100	100	100	100	100	100	100	100	100	Kinihira	100	89	89	100	100	100	100	100	100
Rutongo	100	100	100	100	100	100	100	100	100	Rutongo	100	100	87	100	100	100	100	100	100
Gatonde	100	100	100	100	100	100	100	100	100	Gatonde	100	100	100	100	100	100	86	100	100
Butaro	100	100	100	100	100	100	100	100	100	Butaro	100	95	95	100	90	100	100	100	100
Ruli	100	100	100	100	100	100	100	100	100	Ruli	100	100	100	100	100	100	100	100	100
Nemba	100	100	100	100	100	100	100	100	100	Nemba	100	100	100	100	100	90	100	100	100
Ruhengeri	100	100	100	94	89	89	100	100	100	Ruhengeri	94	94	100	94	89	89	100	100	100
Byumba	100	100	100	100	100	100	100	100	96	Byumba	100	100	100	100	100	100	100	100	96
CHUB	100	100	100	100	100	100	100	100	100	CHUB	100	100	100	100	100	100	100	100	100
Kabutare	100	100	100	100	95	100	89	100	95	Kabutare	95	100	95	100	95	100	89	100	95
Kabgayi	100	100	100	100	100	100	100	100	100	Kabgayi	100	100	92	100	100	100	85	92	100
Kibilizi	100	100	100	100	100	100	100	100	100	Kibilizi	100	91	100	100	91	100	100	100	100
Gakoma	100	100	100	100	100	100	100	100	100	Gakoma	83	100	100	100	83	100	100	100	100
Gitwe	100	100	100	100	100	100	100	100	100	Gitwe	100	100	89	100	78	78	100	100	78
Ruhango	100	100	100	100	100	100	100	100	100	Ruhango	100	88	100	100	100	100	100	100	100
Remera Rukoma	100	100	100	100	100	100	100	93	93	Remera Rukoma	100	100	100	93	93	93	100	93	100
Nyanza	100	95	95	95	100	100	100	100	100	Nyanza	95	95	100	100	89	95	95	95	95
Kigeme	100	100	100	100	100	100	100	100	92	Kigeme	100	100	100	100	100	100	100	100	92
Kaduha	100	100	100	100	100	100	100	100	100	Kaduha	100	90	100	100	100	100	100	90	90
Munini	100	100	100	100	100	100	100	100	100	Munini	100	100	100	100	100	88	94	100	100
Bushenge	100	100	100	100	88	100	100	88	100	Bushenge	100	100	88	100	88	100	88	88	100
Kibogora	100	100	100	100	100	100	100	100	100	Kibogora	100	100	100	93	100	100	100	100	100
Kibuye	100	100	100	100	100	100	100	100	100	Kibuye	100	100	100	100	100	92	92	100	100
Kirinda	100	100	100	100	100	100	100	100	100	Kirinda	100	100	100	100	100	83	100	100	100
Mugonero	100	100	100	100	100	100	100	100	100	Mugonero	100	100	100	100	86	100	100	100	86
Shyira	88	100	100	100	88	100	100	100	100	Shyira	88	100	100	100	88	100	100	100	100
Muhororo	100	100	100	100	100	100	100	100	100	Muhororo	100	100	90	100	100	100	100	100	100
Kabaya	100	100	100	100	100	100	100	100	100	Kabaya	100	100	86	100	100	86	100	86	100
Gihundwe	100	100	100	100	80	100	100	90	100	Gihundwe	100	100	100	100	70	100	100	90	100
Mibilizi	100	100	100	100	100	100	100	100	100	Mibilizi	100	100	100	100	100	100	100	100	100
Gisenyi	100	100	100	100	100	88	100	100	100	Gisenyi	94	100	100	94	100	88	100	100	100
Murunda	95	100	100	100	100	95	100	100	100	Murunda	95	100	100	100	100	95	100	100	95
CHUK	100	100	100	100	100	100	100	100	100	CHUK	100	0	100	100	100	100	100	100	100
Nyarugenge	89	100	100	100	100	100	100	100	100	Nyarugenge	89	89	89	100	100	100	100	100	100
Muhima	100	100	100	100	100	100	100	100	100	Muhima	100	100	100	100	100	100	100	100	75
RMH	0	100	100	100	100	100	100	100	100	RMH	0	100	100	100	0	100	100	100	100
Masaka	92	100	100	100	100	100	100	100	100	Masaka	92	100	100	100	100	100	100	100	100
Kigababaga	95	100	100	90	95	90	95	95	95	Kigababaga	80	95	100	85	100	70	90	95	80
Kacyiru	100	100	100	0	100	100	100	100	100	Kacyiru	100	0	100	0	0	0	0	100	0
KFH	0	100	100	100	100	0	100	100	100	KFH	0	100	100	100	0	0	0	100	0
Caraes Ndera	100	100	100	0	0	100	0	0	0	Caraes Ndera	0	100	100	0	0	0	0	0	0
Nyabikenke	100	100	100	100	100	100	100	100	100	Nyabikenke	100	100	100	100	100	100	100	100	100
Rwanda	99	99	100	99	98	98	99	99	99	Rwanda	97	98	98	98	95	95	98	98	97