



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 15 – 2024

(08-14 April 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 15/2024

Event Based Surveillance (EBS) Highlights:

- **Alerts from community: 23 alerts:** 14 Human Deaths, 2 Human illness, 4 dog bites and 3 animal illness or Death
- **Alerts from EIOS: 3 alerts:**
 - Dengue fever threatens Khartoum Bahri
 - As Measles Spreads Through U.S., Cases in Europe and Central Asia Surge
 - DRC - Plague outbreak 2024

Indicator Based Surveillance (IBS) Highlights:

- 561 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, typhoid fever, foodborne illness, snake bite and viral conjunctivitis
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for the Epi Week 15 revealed that no disease surpassed the epidemic threshold
- A total of 77 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 15

- Foodborne illness in Ngoma district, Rurenge sector, Rugese cell, Kamwiru Village
- Adenovirus conjunctivitis in Gisagara District, Mugombwa refugee camp
- Update on viral conjunctivitis cases in Rwanda

Completeness and timeliness

In Epi Week 15, the overall completeness and timeliness of surveillance data reporting in Rwanda was 98% and 95% respectively.

WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 15

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: 23**

- 14 Human Deaths
- 4 Dog Bites
- 3 animal illness or Death
- 2 Human Illness

- **Alert from EIOS: 3**

- Dengue fever threatens Khartoum Bahri
<https://www.dabangasudan.org/en/all-news/article/dengue-fever-threatens-khartoum-bahri>
- As Measles Spreads Through U.S., Cases in Europe and Central Asia Surge
<https://www.forbes.com/sites/joshuacohen/2024/04/14/alarming-measles-outbreaks-surge-across-europe-and-central-asia/?sh=2f38ee203390>
- DRC - Plague outbreak 2024
<https://flutrackers.com/forum/forum/africa/africa-all-other-diseases/986011-drc-plague-outbreak-2024#post988370>

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 15

During this Epi week, 561 cases of immediate reportable diseases were notified:

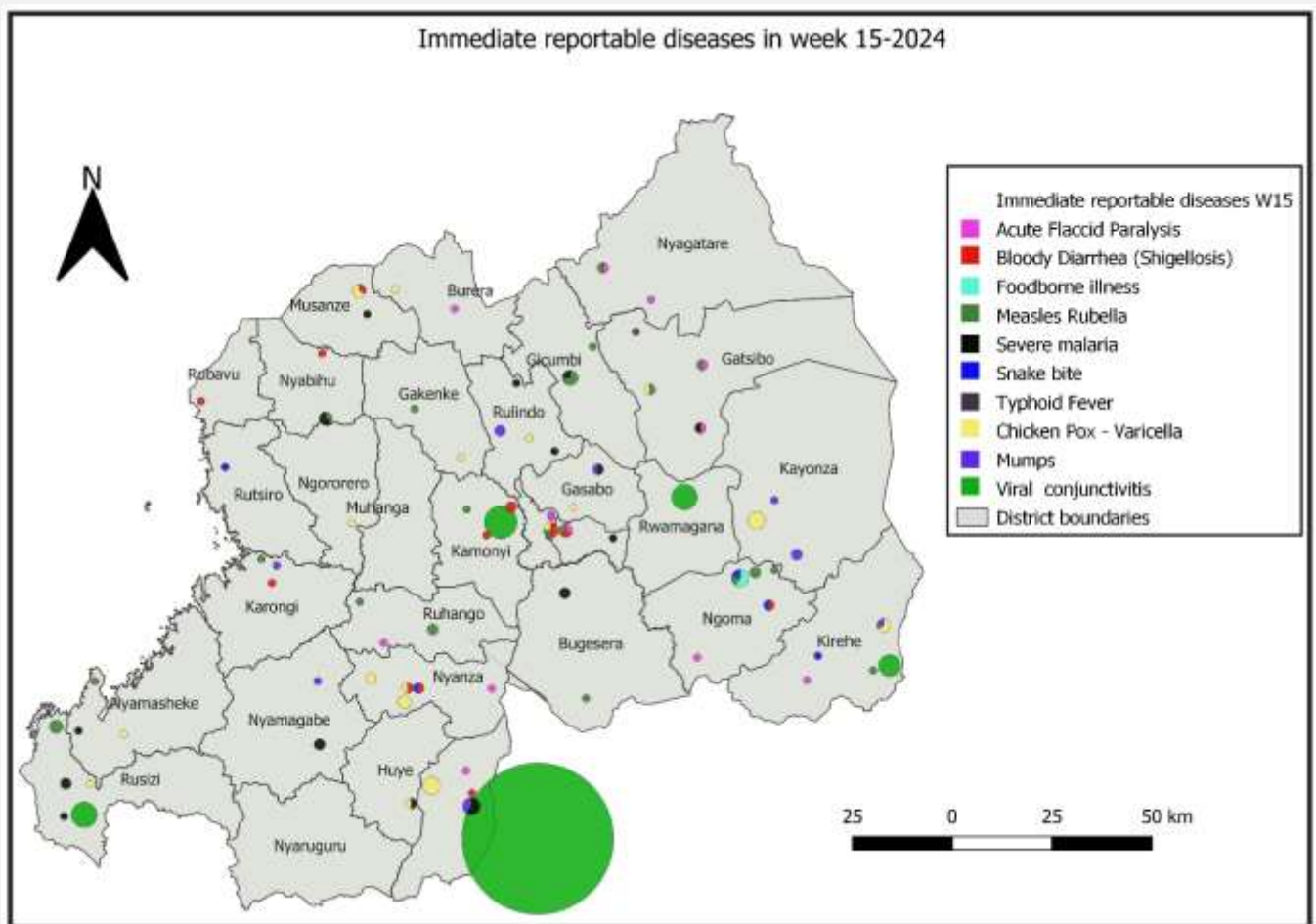
- 32 cases of chicken pox were reported by 18 HF. No health facility crossed the threshold.
- 11 cases of mumps were reported by 8 HCs. No HF crossed the threshold.

- 14 suspected cases of bloody diarrhea (Shigellosis) were reported by 12 health facilities. The samples were taken and sent to NRL. For the samples of the previous week, 4 samples from Biryogo HC, 1 from Kabatwa HC and Mbazi HC were tested positive for Shigella flexnei.
- 26 suspected cases of Measles/Rubella were reported by 20 HCs. The samples were taken and sent to NRL.
- 21 cases of severe malaria were reported by 15 health facilities
- 13 cases of acute flaccid paralysis were reported by 13 health facilities, the samples were taken and sent to NRL for transportation to UVRI laboratory.
- 435 cases of viral conjunctivitis were reported by 5 health facilities, including 387 cases reported by one HC, they are described in outbreak section.
- 5 cases of snake bite were reported by 5 health facilities.
- 3 Foodborne illness cases were reported by 1 health facility
- 1 suspected case of typhoid fever 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:



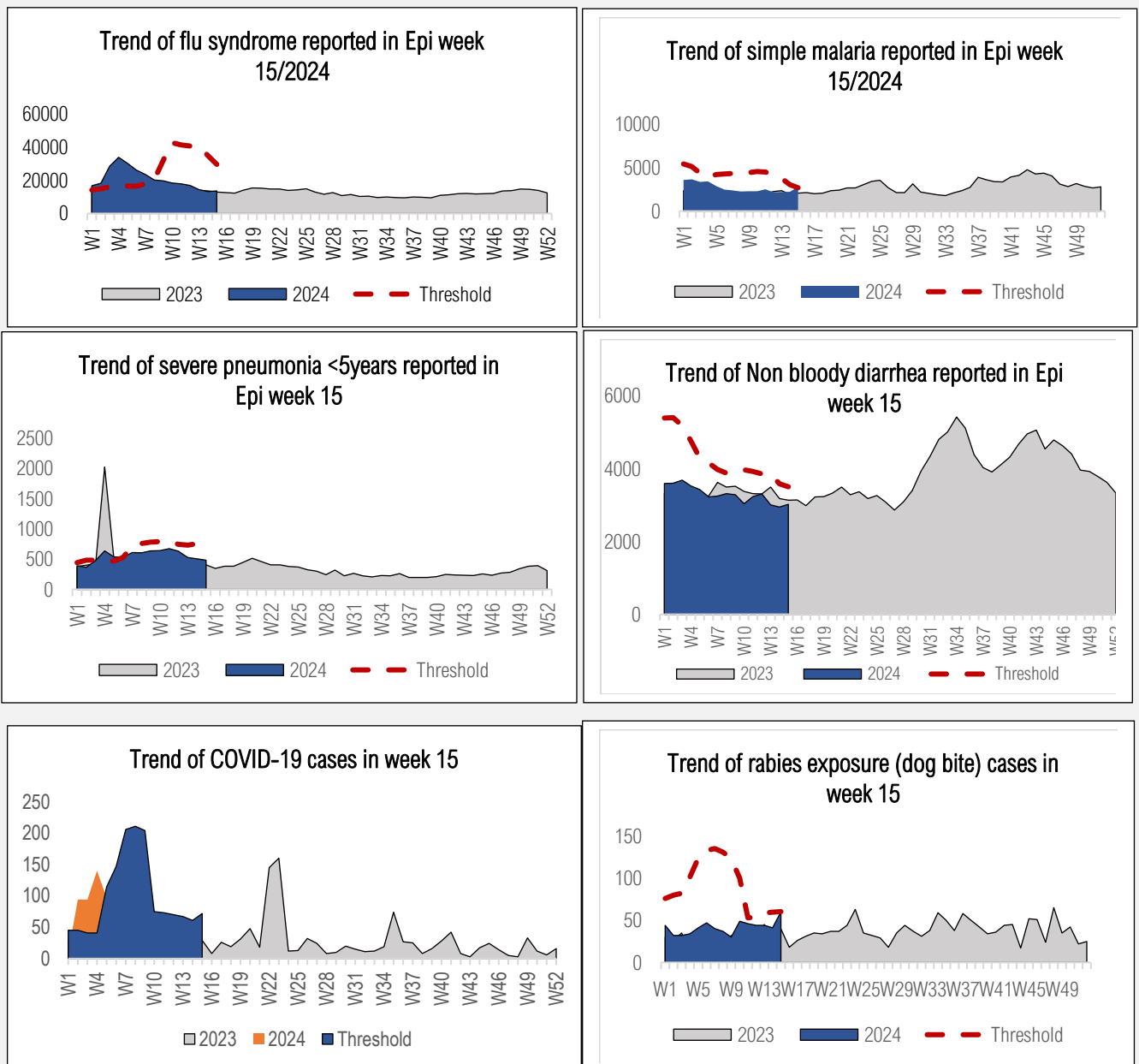
Distribution of immediate reportable diseases in Epi week 15

B. WEEKLY REPORTABLE DISEASES – EPI WEEK 15

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.

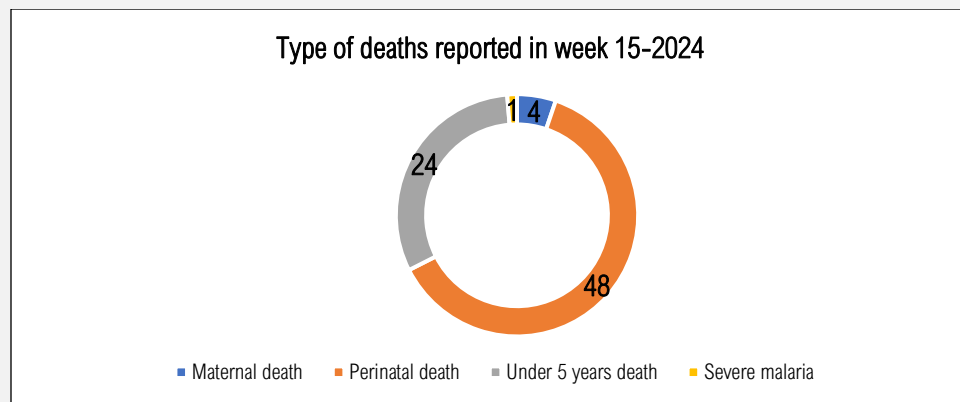
In Epi Week 15, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to their respective epidemic thresholds. The results of the analysis revealed that no disease crossed the epidemic thresholds.

The figures below show the weekly reportable diseases trends:



DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 15

As summarized in the Pie Chart below, a total number of 77 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 48 (62%) were perinatal, 24 (31%) were the deaths of children under 5 years old (including 3 deaths due to severe pneumonia of under 5 children), 4(5%) maternal deaths and 1(1%) death due to severe malaria.

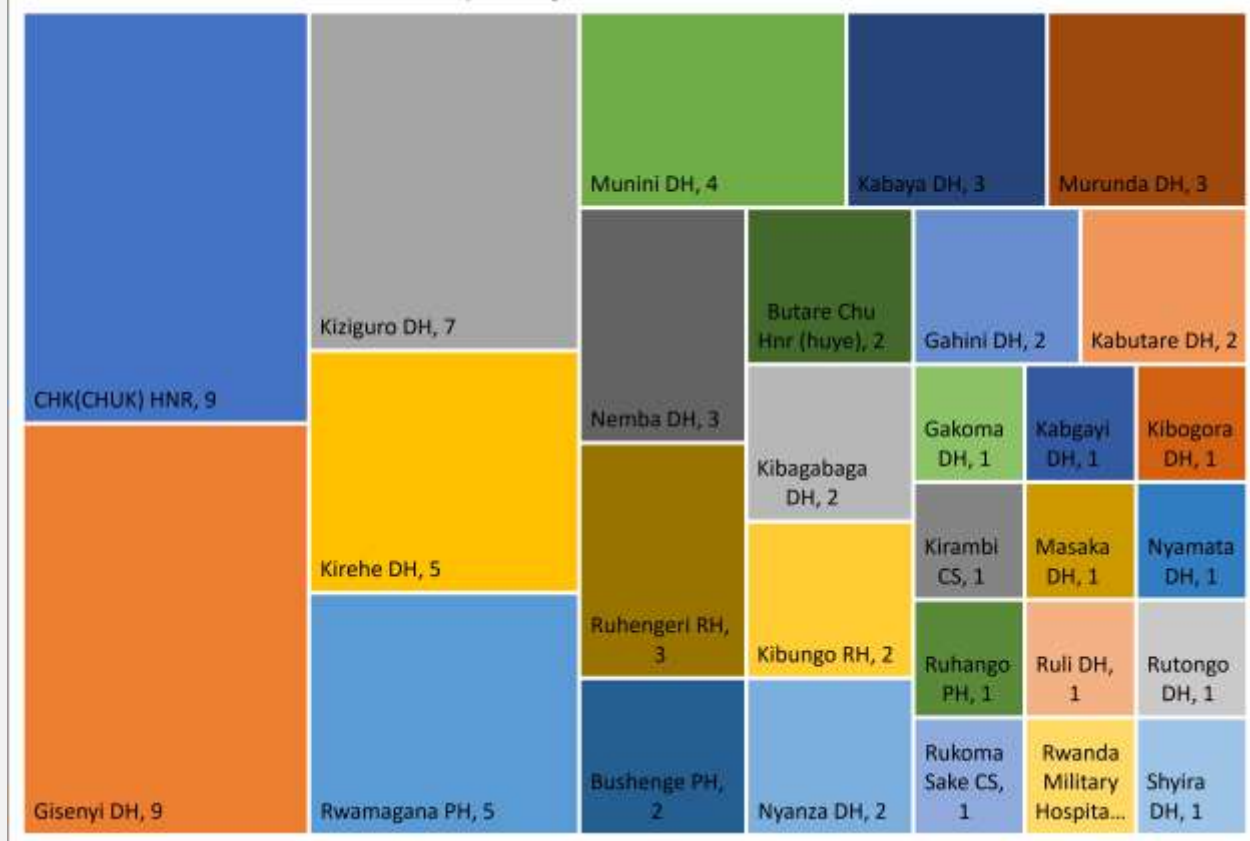


Cause of deaths declared in epi week 15

66 deaths were reported from various catchment areas as follow:

- 9 deaths were reported respectively by CHUK (3 perinatal deaths and 6 under 5 years deaths); Gisenyi DH (7 perinatal deaths, 2 under 5 years deaths)
- 7 deaths were reported by Kiziguro DH (6 perinatal deaths, 1 under 5 years death)
- 5 deaths were reported respectively by Kirehe DH (3 perinatal deaths, 2 under 5 years deaths) and Rwamagana PH (1 maternal death and 4 perinatal deaths)
- 4 deaths were reported by Munini DH (all deaths were under 5 years deaths)
- 3 deaths were reported respectively by Kabaya DH and Murunda DH (2 perinatal deaths and 1 under 5 years death for each one), Nemba DH (1 perinatal deaths and 2 under 5 years deaths), Ruhengeri RH Reported 2 perinatal deaths and 1 death due to severe malaria.
- 2 deaths reported respectively by CHUB, Gahini DH, Kabutare DH, Kibagabaga DH (each one reported 2 perinatal deaths); Kibungo RH reported 2 under 5 years deaths; Bushenge PH reported 1 perinatal deaths and 1 under 5 years death; and Nyanza DH reported 1 perinatal death and 1 under 5 years death.
- 1 death was reported respectively by Nyamata DH, RMH, and Rukoma Sake HC in Kibungo RH (each one reported 1 maternal death); Gakoma DH, Kabgayi DH, Masaka DH, Ruhango PH, Ruli DH, Rutongo DH, Shyira DH and Kirambi HC in Nyanza DH (each one reported 1 perinatal death); and Kibogora DH reported 1 under 5 years death.

Deaths reported by health facilities in week 15-2024



Distribution of deaths by health facilities in Epi week 15

OUTBREAK AND EVENT UPDATES IN EPIDEMIOLOGICAL WEEK 15

1. OUTBREAK OF FOODBORNE ILLNESS IN NGOMA DISTRICT, RURENGE SECTOR, RUGESE CELL, KAMWIRU VILLAGE

Confirmed cases	0	Date reported:	April 13, 2024	Risk assessment	Low
Suspected cases	3	Source:	eIDSR		
Death(s)	0	District/HFs:	Kirwa HC/Kibungo RH		
Total cases	3	Geoscope:	Low		

Outbreak description

On April 7th, 2024, patients from Kamwiru village of Ngoma district consulted Kirwa HC with abdominal pain, diarrhea, and vomiting following the consumption of wild mushrooms at their home. Three individuals were consulted at the HC, including 2 males (aged 28 and 56) and a 33-year-old female. All three cases have been transferred to Kibungo RH for further management. All three individuals are stable. Probable cause: consumption of toxic mushrooms.

Actions Taken:

Cases have been treated with IV fluids, metronidazole, and ciprofloxacin.

2. ADENOVIRUS CONJUNCTIVITIS OUTBREAK IN GISAGARA DISTRICT, MUGOMBWA REFUGEE CAMP

Confirmed cases	0	Date reported:	April 13, 2024	Risk assessment	Low
Suspected cases	387	Source:	eIDSR		
Death(s)	0	District/HFs:	Mugombwa RC/Kibilizi DH		
Total cases	387	Geoscope:	Low		

Outbreak description:

Since 1 April 2024 up to 13 April 2024, Mugombwa refugee camp have recoded cumulative cases of viral conjunctivitis of 351 out of 11,700 populations where Female: 226, Male: 125. Among of them 22 cases are under five years. It was observed that the Average age: 20 and most of them are students. All recoded cases presenting symptoms of red eye, eye pain/itching and eye discharge.

As of 15 April 2024, cumulative cases recorded were 387, the active cases: 174.

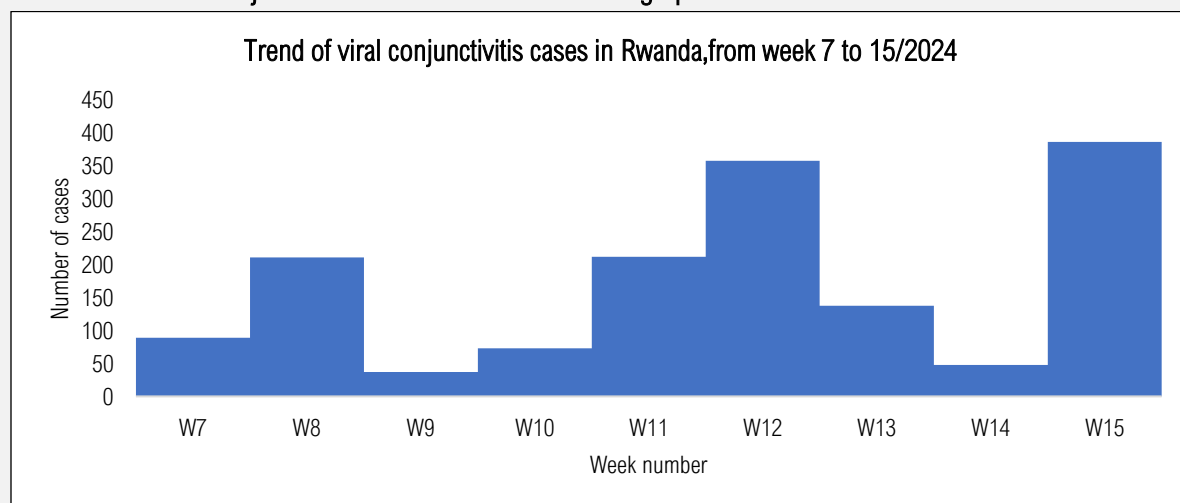
Actions Taken:

- Case management (steroid and antibiotic: Tetracycline and Gentamycin),
- Community awareness on hygiene, handwashing and social distancing.
- A meeting of PHEOC South with Mugombwa refugee camp administration had been conducted to strengthen surveillance, active cases search, preventive measures and reporting cases.

3. UPDATES ON ONGOING OUTBREAK OF VIRUS CONJUNCTIVITIS IN RWANDA




For the trend of viral conjunctivitis cases, the outbreak started from February 15th, 2024 in week 7, and cases continue to occur up to date. The pick was observed in week 12, the number of cases decreased in week 13 and 14, but they increased in this week 15, due to the occurrence of a high number of cases in Mugombwa refugee camp. As of 15 April 2024, the cumulative number of cases reported was 1553.

The trend of viral conjunctivitis is shown on the following epi-curve.



eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 15

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 15, the overall completeness and timeliness of disease surveillance data reporting in Rwanda decreased to 98% and 95%, respectively. With regards to completeness of surveillance reports, almost all hospitals had a high completeness score (>80%), except Rwanda military hospital that had a low completeness (<60%). For the timeliness, many hospitals had a high timeliness score (>80%), except 1 hospital that had a moderate score (between 60% and 79%): Nyamata DH and 1 hospital that had a low score (below 60%): Rwanda military hospital.

Notes: The health facilities that did not have a high score for 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.

