



# WEEKLY EPIDEMIOLOGICAL BULLETIN

## WEEK 07 – 2024

(12-18 February 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 07/2024

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

- During the Epidemiological Week 07, no event notified through the electronic Community Event Based Surveillance System (eCEBS)

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

- Zimbabwe declares polio outbreak, rolling out vaccination program.
- Black quarter livestock disease confirmed in Gulu.

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

- 311 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, Bacterial meningitis, chicken pox, foodborne illness and viral conjunctivitis
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for Epi Week 07 revealed that no disease surpassed the epidemic threshold
- A total of 70 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 07

Four outbreaks were reported:

1. An outbreak of conjunctivitis at GS Rwankuba, a boarding school in Gakenke district.
2. An outbreak of viral conjunctivitis in Nyamasheke District
3. Suspected Shigellosis in Nyagatare District, Gatunda sector, Nyarurema cell, Nyarurema Health center.
4. Foodborne illness in Burera District and Gicumbi district.

#### Completeness and timeliness

In Epi Week 07, 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 07

**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 07, no event notified from community through eCBS:

### MEDIA SCAN

Two alerts from EIOS were detected:

- **Zimbabwe declares polio outbreak, rolling out vaccination program.**

HARARE, Feb. 16 (Xinhua) -The Zimbabwean government on Friday declared a polio outbreak in the country and announced a rollout of vaccinations starting Feb. 20. Deputy Minister of Health and Child Care Sleiman Kwidini made the announcement at a media briefing and urged the public not to panic as the government has taken swift action to contain the outbreak. He said his ministry has done laboratory tests and confirmed the presence of a Type 2 circulating poliovirus variant in environmental samples that were collected toward the end of 2023 from some sewage sites in Harare, the capital of Zimbabwe. A similar variant was also detected in a 10-year-old child in another province. In both cases, the virus was a rare type that could occur when the weakened live virus in the oral polio vaccine mutated over time and became able to circulate in the community, he said. "The detection of these viruses in the environment or in humans constitutes a polio outbreak in the country.

While the news is concerning, we as a ministry would like to reassure the public that we have taken swift action to investigate and contain the outbreak to prevent any further spread that may occur," he said. Kwidini said two rounds of polio vaccinations targeting children below 10 years of age have been scheduled for February and March, with the first round taking place between Feb. 20 and March 1, and the second between March 19 and 29. "Given the contagious nature of circulating polioviruses and their capacity to evolve over time to a type that causes serious disease and debilitating paralysis, the ministry strongly encourages all parents and caregivers of children to ensure that all children below 10 years of age are vaccinated against polio and protected," he said. The minister said several other countries in the region, including Botswana, Zambia, Burundi, Rwanda, Malawi, and Mozambique, have also been affected and are working with Zimbabwe in a bid to control the outbreak. [http://www.china.org.cn/world/Off\\_the\\_Wire/2024-02/16/content\\_117002633.htm](http://www.china.org.cn/world/Off_the_Wire/2024-02/16/content_117002633.htm)

- **Black quarter livestock disease confirmed in Gulu.**

In Uganda, Gulu District veterinary department has confirmed an outbreak of black quarter, an infectious and fatal bacterial livestock disease. The disease was first reported by livestock farmers and local leaders over the weekend in the villages of Patalira, Kal, and Pawel Angany all in Patiko Sub- County where more than a dozen animals had shown symptoms. Black Quarter disease is an acute infectious and highly fatal, bacterial disease of cattle. The acute nature of the disease makes successful treatment difficult, but there is an effective vaccine

available to provide animals with protective immunity. Black quarter also known as black leg disease is a severe acute, burning, and highly fatal disease of cattle and sheep caused by *Clostridium chauvoei*. The disease is manifested by high fever and lameness followed by swelling in the neck, shoulder, lumbar, gluteal, and sacral regions. Tuesday that the samples extracted from the suspected infected cattle for test on Monday turned positive for black quarter. At least two cattle have already died from the disease adding that several others are reportedly showing signs and symptoms.

Opiyo says Patiko sub-county in particular has been an area prone to black quarter disease and notes that the disease is always spread during the dry season when livestock graze to the surface of the ground. He warned farmers against eating the carcasses of infected animals while still alive or dead to limit the spread of the disease. Opiyo urged the livestock farmers to vaccinate their cattle against the black quarter arguing that the disease falls among those that the government can't be notified about and thus a farmer has to foot the treatment expenses.

<https://www.independent.co.ug/black-quarter-livestock-disease-confirmed-in-gulu/>

## 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 07

During this Epi week, 311 cases of immediate reportable diseases were notified:

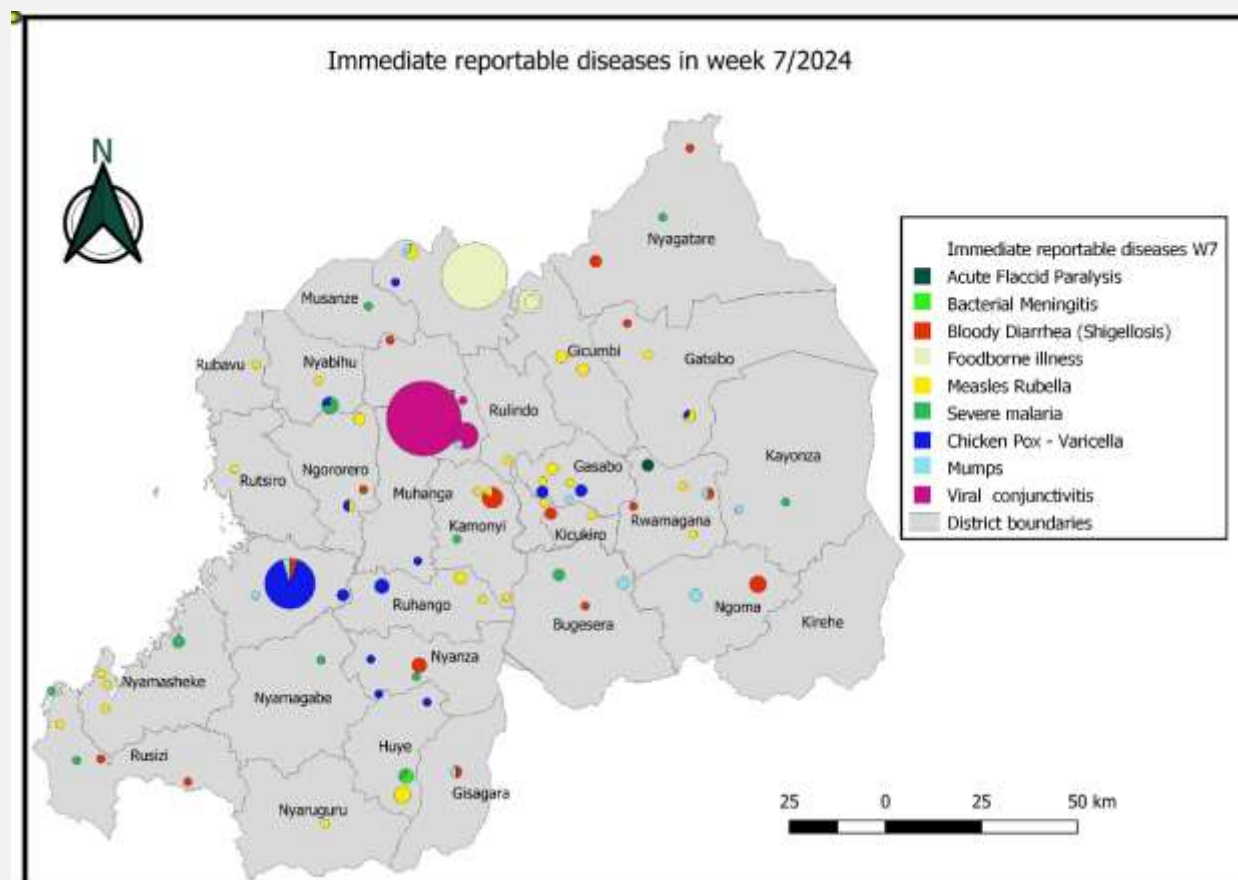
- 35 cases of chicken pox were reported by 13 HFs. Birambo HC (in Kirinda DH) crossed the threshold.
- 12 cases of mumps were reported by 10 HCs. No HF crossed the threshold
- 27 suspected cases of bloody diarrhea (Shigellosis) were reported by 16 health facilities. The samples were taken and sent NRL.
- 39 suspected cases of Measles/Rubella were reported by 29 HCs. The samples were taken and sent to NRL. For the samples of the previous weeks, a sample from Cyanika HC was tested positive for measles and Rubella (IgM+), and one sample from Kinazi HC was tested positive for Rubella IgM+, other samples were tested negative.
- 16 cases of severe malaria were reported by 12 health facilities
- 2 cases of acute flaccid paralysis were reported by 1 health facility, the samples were taken and sent to NRL for transportation to UVRI laboratory.
- 2 cases of suspected Bacterial meningitis from CHUB, the sample were tested negative.
- 73 suspected cases of foodborne illness were reported by 3 health facilities, the cases are described below in the section of outbreak and events update.
- 90 cases of viral conjunctivitis were unusually reported by 3 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:



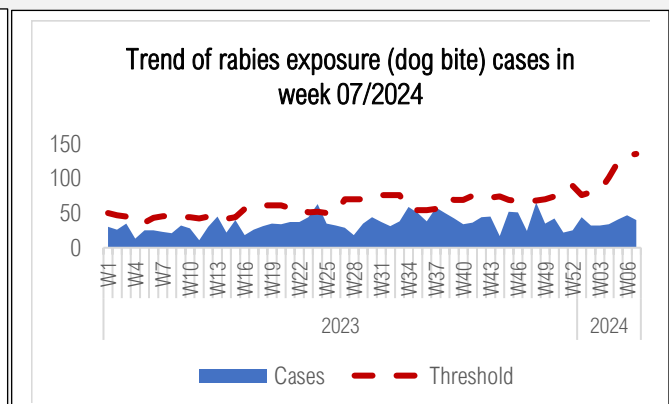
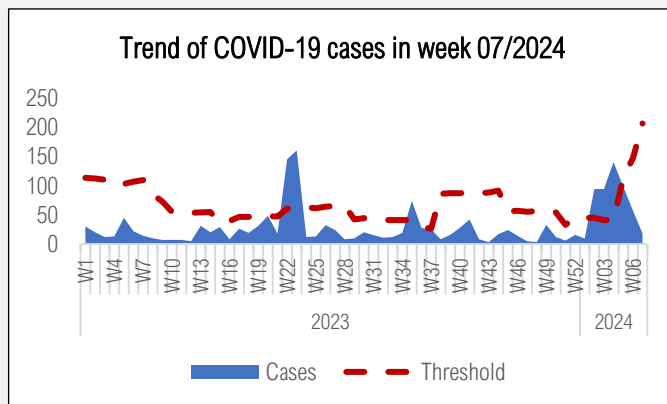
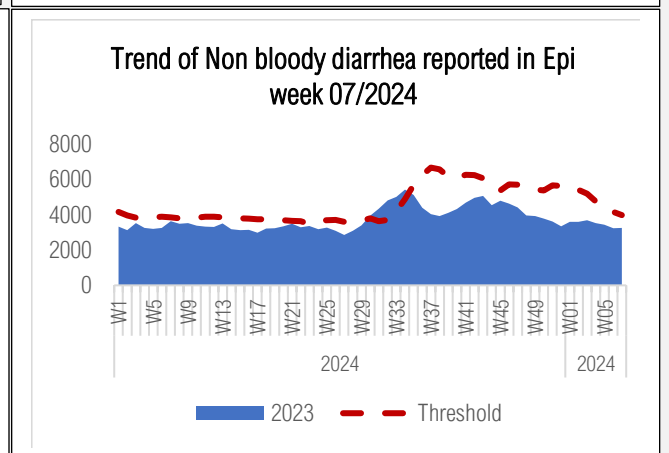
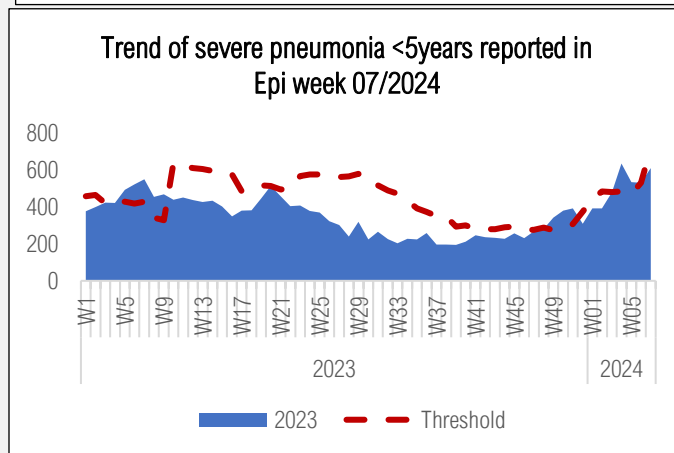
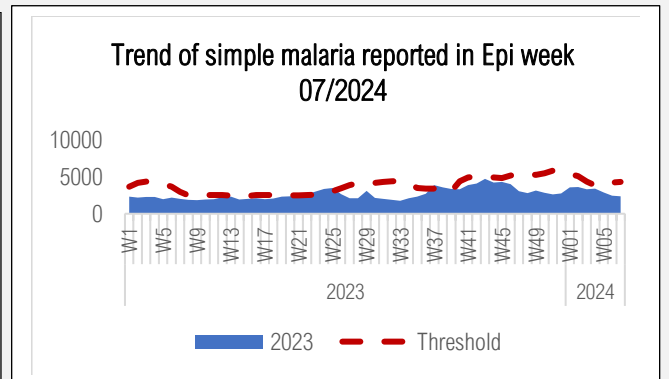
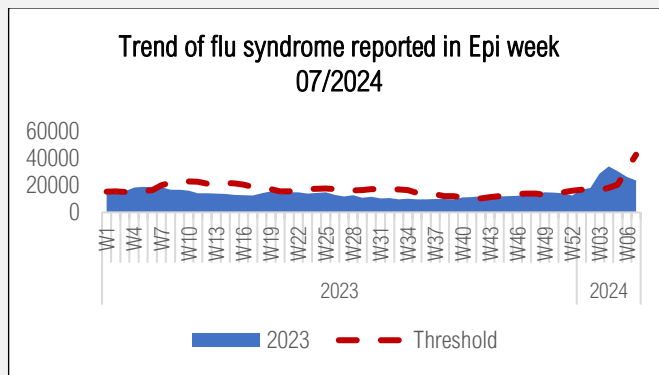
*Distribution of immediate reportable diseases in Epi week 07*

#### B. WEEKLY REPORTABLE DISEASES – EPI WEEK 07

**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.

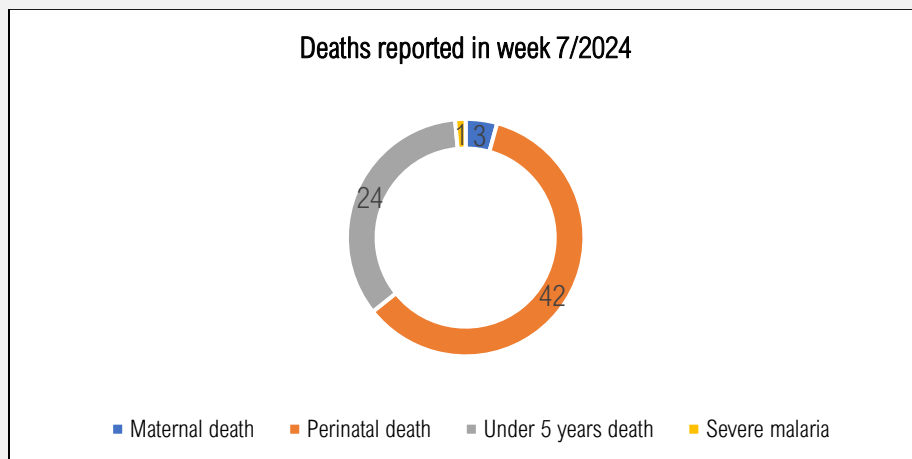
In Epi Week 7, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to their respective epidemic thresholds. The results of the analysis revealed that no disease crossed the epidemic thresholds.

The figures below show the weekly reportable diseases trends:



### C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 07

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, 42 (60%) were perinatal, 24 (34%) were deaths of children under 5 years old (including 2 deaths due to severe pneumonia), 1 (1%) death due to severe malaria, and 3 (4%) maternal deaths.

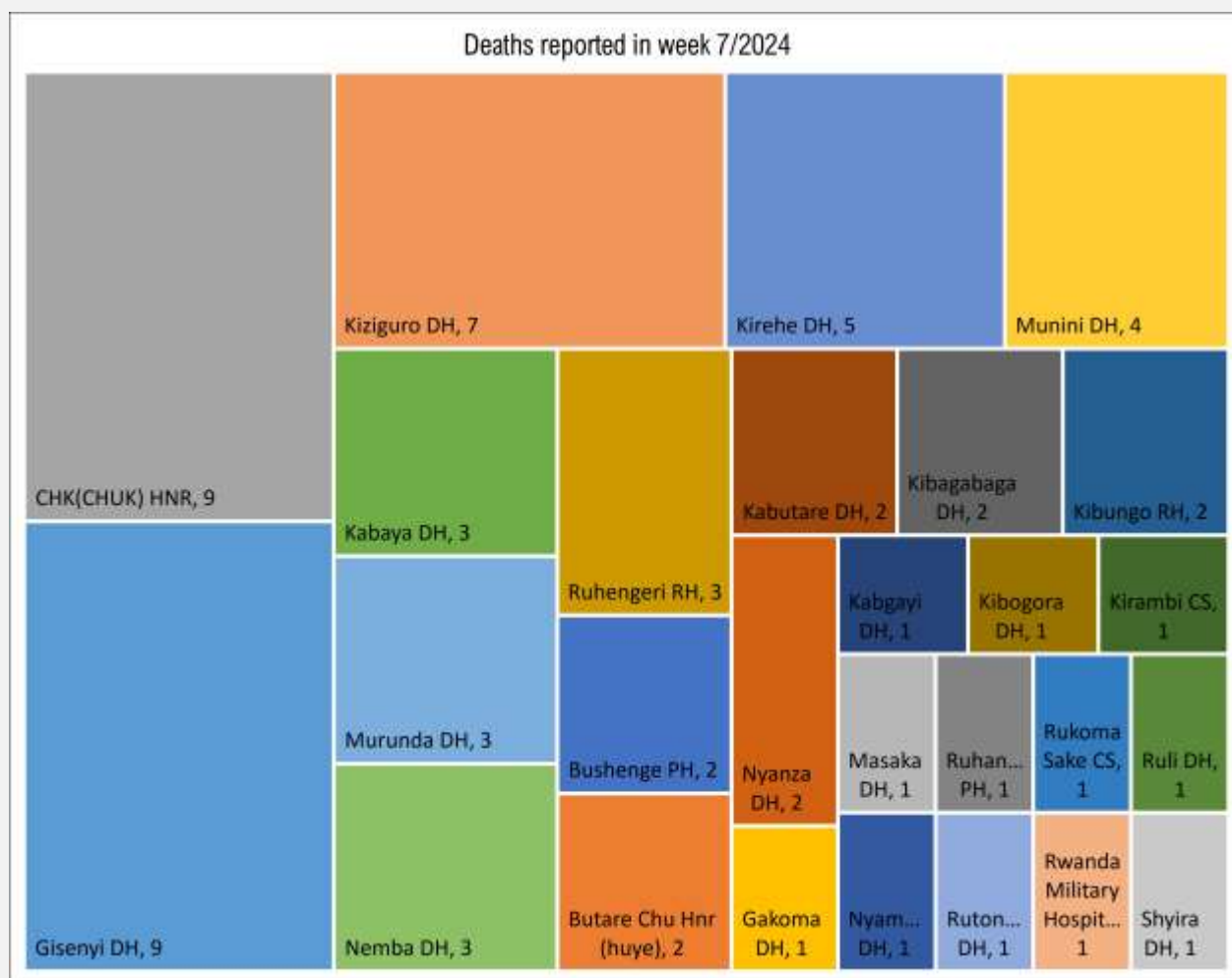


*Cause of deaths declared in epi week 07*

70 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) and Gisenyi DH (7 perinatal deaths and 2 under 5 years deaths)
- 7 deaths were reported by Kiziguro DH (6 perinatal deaths and 1 under 5 years death)
- 5 deaths were reported by Kirehe DH (5 perinatal deaths and 2 under 5 years deaths)
- 4 deaths were reported by Munini DH (all were under 5 years deaths)
- 3 deaths reported by respectively by Kabaya DH (2 were perinatal deaths and 1 under 5 years death); Murunda DH (2 perinatal death and 1 under 5 years death); Nemba DH (1 perinatal death and 2 under 5 years deaths); Ruhengeri RH (2 perinatal deaths and 1 death due to severe malaria)
- 2 deaths were reported respectively by CHUB, Kabutare DH, Kibagabaga DH (all were perinatal deaths); Bushenge PH (1 perinatal death and 1 under 5 years death); Kibungo RH (2 under 5 years deaths) and Nyanza DH (1 perinatal death and 1 under 5 years death)
- 1 death was reported respectively by Gakoma DH, Kabgayi DH, Masaka DH, Ruhango PH, Ruli DH, Kirambi HC in Nyanza DH, Rutongo DH, Shyira DH, every health facility reported 1 perinatal death; Kibogora DH reported 1 under 5 years death; while each of the following health facilities reported 1 maternal death: Nyamata DH, Rwanda Military Hospitala and Rukoma Sake HC in Kibungo RH.





*Distribution of deaths by health facilities in Epi week 07*

## OUTBREAK AND EVENT UPDATES IN EPIDEMIOLOGICAL WEEK 07

### 1. AN OUTBREAK OF CONJUNCTIVITIS AT GAKENKE DISTRICT, RUSHASHI SECTOR, GS RWANKUBA

|                 |    |                |                     |                 |     |
|-----------------|----|----------------|---------------------|-----------------|-----|
| Confirmed cases | 0  | Date reported: | February 14, 2024   | Risk assessment | Low |
| Suspected cases | 79 | Source:        | eIDSR               |                 |     |
| Death(s)        | 0  | District/HFs:  | Rwankuba HC/Ruli DH |                 |     |
| Total cases     | 79 | 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. In total, there was 17 cases, aged 12-21 years, comprising 8 boys and 9 girls.

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 19/02/2024, Rwankuba HC reported 79 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.

## 2. AN OUTBREAK OF VIRAL CONJUNCTIVITIS IN NYAMASHEKE DISTRICT

|                 |   |                |                   |                 |     |
|-----------------|---|----------------|-------------------|-----------------|-----|
| Confirmed cases | 0 | Date reported: | February 16, 2024 | Risk assessment | Low |
| Suspected cases | 1 | Source:        | eIDSR             |                 |     |
| Death(s)        | 0 | District/HFs:  | Gihundwe DH       |                 |     |
| Total cases     | 1 | Geoscope:      | Low               |                 |     |

**Description:**

On 16/02/2024, a 25-year-old male resident of Rugabano Village, Ninzi Cell, Kagano Sector, Nyamasheke District, sought medical consultation at Gihundwe District Hospital. He presented symptoms of blurry vision, redness of the eyes, eye discharge accompanied by itching, which had manifested since February 13, 2024.

Following assessment by the hospital ophthalmologist, he received treatment and was educated on proper hygiene practices to prevent the spread of the illness within his community. The patient lives with his two siblings and works as a shoe vendor in Bushenge market and Kirambo market (rotating between different local markets accordingly). He stated no recent travel history outside the country but acknowledged that some of his colleagues who sell shoes do travel to the Democratic Republic of Congo (DRC).

**Actions Taken:**

The case was treated as an outpatient department (OPD) case with Dex neomycin eye drops and given an appointment to return on 21/02/2024.

## 3. SUSPECTED SHIGELLOSIS IN NYAGATARE DISTRICT, GATUNDA SECTOR, NYARUREMA CELL

|                 |    |                |                         |                 |     |
|-----------------|----|----------------|-------------------------|-----------------|-----|
| Confirmed cases | 0  | Date reported: | February 10, 2024       | Risk assessment | Low |
| Suspected cases | 10 | Source:        | eIDSR                   |                 |     |
| Death(s)        | 0  | District/HFs:  | Nyarurema HC/Gatunda DH |                 |     |
| Total cases     | 10 | Geoscope:      | Low                     |                 |     |

### Description:

Since 10/02/2024 the cases of bloody diarrhoea have been reported through the electronic Integrated Disease Surveillance and Response (e-IDSR) system by Nyarurema Health Center, raising suspicion of shigellosis. The increasing number of reported cases prompted the PHEOC team to initiate the verification of alert. A total of 10 individuals, including 8 students from ETP Nyarurema, a private Catholic boarding school, were admitted to the health center. Stool samples, revealing the presence of white and red blood cells, prompted the decision to collect 6 samples for copro-culture at the National Reference Laboratory (NRL). However, a shortage of transport media in the catchment area initially hindered this process.

### Actions Taken:

- The PHEOC team liaised with the NRL, facilitating the availability of transport media. However, only one sample met the requirements for immediate culture, as the rest were discarded. This sample arrived at NRL on Wednesday.
- Case management: the patients received treatment with Oral Rehydration Solution (ORS), Buscopan, and ciprofloxacin.
- A thorough investigation, guided by Gatunda Hospital, indicated that no general hygiene defects but raised suspicions regarding the cleanliness of water tanks in use.
- Health education was provided, and active case finding was initiated.

### Way Forward:

- Continuous follow-up and case management.
- Follow up on sample results at NRL.
- Sustained efforts in active case finding.

## 4. FOODBORNE ILLNESS IN BURERA AND GICUMBI DISTRICTS

|                 |    |                |  |                 |     |
|-----------------|----|----------------|--|-----------------|-----|
| Confirmed cases | 0  | Date reported: | February 15, 2024                                    | Risk assessment | Low |
| Suspected cases | 54 | Source:        | eIDSR  |                 |     |
| Death(s)        | 0  | District/HFs:  | Cyumba,Rubaya HCs/Byumba DH<br>Bushenya HP/Butaro DH |                 |     |
| Total cases     | 54 | Geoscope:      | Low  |                 |     |

### Description:

On February 15, 2024, at 9:00 PM, Cyumba Health Center and Rubaya Health Center in Gicumbi District received 17 patients complaining of abdominal pain, vomiting, diarrhoea, headache, and fever. They had attended a memorial event in Burera District, Bungwe Sector, Bushenya Cell, Bushenya Village, where Ubushera and meat were served.




On February 16, 2024, Bushenya Health Post in Burera District, Bungwe Sector, received 37 additional cases with the same symptoms from the same event. In total, 54 cases have been consulted, including 46 adults and 8 children. The estimated Attack Rate (AR) was 54/300 (18%).

#### Actions Taken:

- Case management with fluid replacement was provided at Rubaya Health Center, Cyumba Health Center, and Bushenya Health Post
- Laboratory examinations revealed different worms in some cases.

## eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 07

*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 07, the overall completeness and timeliness of disease surveillance data reporting in Rwanda was 99% and 98%, 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 with a low score (below 60%): Kacyiru and CARAES Ndera.

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