



WEEK 02 - 2024

(08-14 January 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 02/2024

Event Based Surveillance (EBS) Highlights:

- During the epidemiological week 02, no signal was notified through the electronic Community Event Based Surveillance System (eCEBS)
- o No alert was identified through the Epidemic Intelligence from Open Source (EIOS)

Indicator Based Surveillance (IBS) Highlights:

- 178 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, severe malaria, bacterial meningitis, typhoid fever, snake bite and chicken pox.
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for Epi Week 01 revealed that no disease surpassed the epidemic thresholds.
- A total of 58 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 02

Foodborne illness outbreak in Burera district

Completeness and timeliness

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In Epi Week 02, 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 02

**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 02, no signal was notified from community through eCBS:

## MEDIA SCAN

No alert found

# 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 02

During this Epi week, 178 cases of immediate reportable diseases were notified:

- 51 cases of chicken pox were reported by 24 HFs. No HF crossed the threshold.
- 33 cases of mumps were reported by 16 HCs. One HF crossed the threshold (Buramba HC in Nyabikenke DH).
- 24 suspected cases of bloody diarrhea (Shigellosis) were reported by 13 health facilities. For samples sent to NRL in the previous week 01, results are still pending.
- 23 suspected cases of Measles/Rubella were reported by 20HCs. The samples were taken and sent to NRL; results are pending.
- 21 cases of severe malaria were reported by 15 health facilities, including Byumba DH, Gatonde DH, Kaduha DH, Kibilizi DH, Kigeme DH, Kibuye RH, Masaka DH, Mibilizi DH, Murunda DH, Nyagatare DH, Nyamata DH, Rutongo DH, Cyanika (nyamagabe) CS, Kirarambogo CS, Nyange (ruli) CS.
- 5 cases of acute flaccid paralysis were reported by 5 health facilities
- 9 cases of foodborne illnesses were reported in Cyanika HC (Burera), the outbreak is described in outbreaks and events updates section.
- 1 suspected case of bacterial meningitis was reported by Muhima DH, the sample was tested, the result was negative

- 8 snake bite cases were reported by Kibungo RH, Kirehe HC, Kirehe DH, Kirwa HC (Kibungo RH), Karenge HC (in Rwamagana PH), Muhima DH, Muhura HC (in Kiziguro DH), Mulindi HC (in Kirehe DH)
- 3 suspected cases of typhoid fever were reported by 2 health facilities: 1 case from Kiziguro DH was tested positive on salmonella typhi at NRL, he was treated and cured; 2 cases from Polyclinic la Medicale de Rubavu

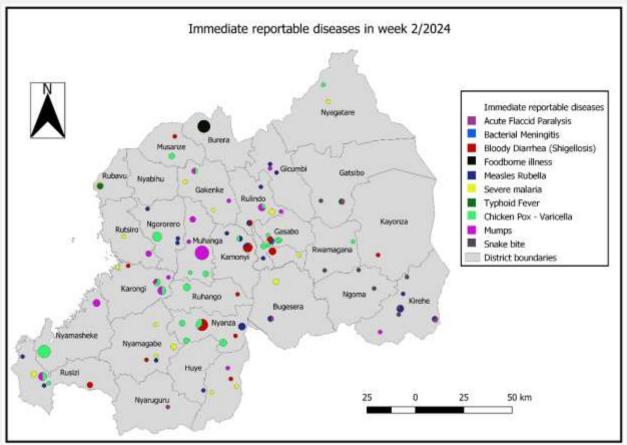
#### Notes:

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 For the diseases whose cases crossed the thresholds, District Hospitals are recommended to strengthen surveillance, investigate and reinforce control measures accordingly. Concerned hospitals include: Byumba DH, Gatonde DH, Kaduha DH, Kibilizi DH, Kigeme DH, Kibuye RH, Masaka DH, Mibilizi DH, Murunda DH, Nyagatare DH, Nyamata DH, Rutongo DH, Cyanika (nyamagabe) CS, Kirarambogo CS, Nyange (ruli) CS.

All confirmed cases and suspected cases had been managed at the health facility level.

## Geographical distribution of cases:



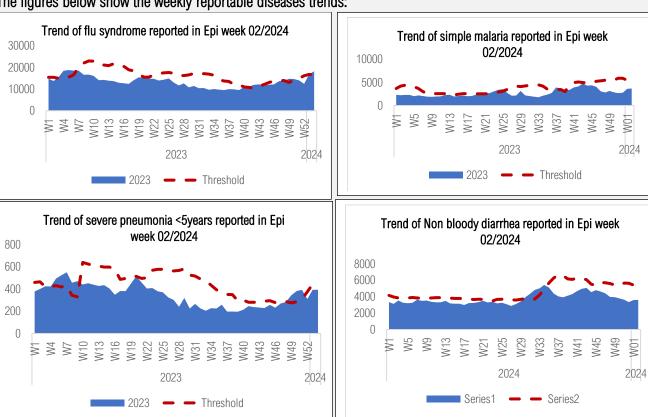
Distribution of immediate reportable diseases in Epi week 02

## B. WEEKLY REPORTABLE DISEASES – EPI WEEK 02

**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.

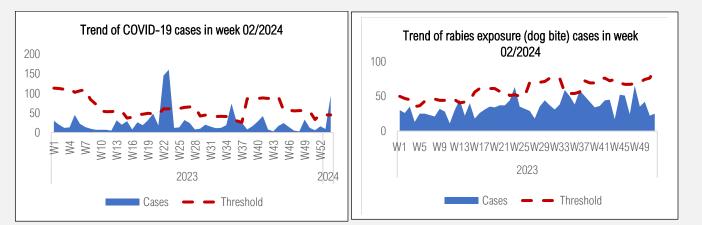
In Epi Week 02, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to their respective epidemic thresholds. The results of the analysis revealed that flu syndrome surpassed the epidemic threshold in Kirehe DH, Rwamagana PH, Kibagabaga DH, Byumba DH, Kibilizi DH, Nyanza DH, Kibuye RH, Gisenyi DH, Murunda DH and Shyira DH. Covid19 also surpassed the epidemic threshold, especially in Kirehe DH, Kibagabaga DH, Muhima DH, Nyarugenge DH, Kabutare DH, Murunda DH and Muhororo DH; that should be related to an increase in Covid19 cases detected during the mass campaign of testing conducted from 12 to 15/01/2024.

Note: The district hospitals that have the cases that surpassed the thresholds are recommended to conducted an investigation.



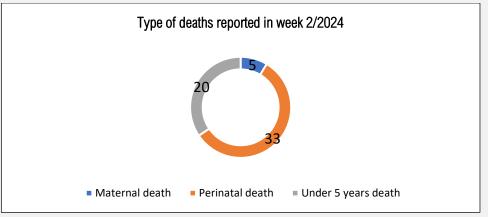
The figures below show the weekly reportable diseases trends:

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## C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR - EPIDEMIOLOGICAL WEEK 02

As summarized in the Pie Chart below, a total number of 58 deaths were reported through the electronic Integrated Disease Surveillance and Response (elDSR) system. Among these deaths, 33 (57%) were perinatal, 20 (33%) were deaths of children under 5 years old (included 1 due to non-bloody diarrhea and 2 deaths due to severe pneumonia of 5 years), and 5 (9%) maternal deaths.

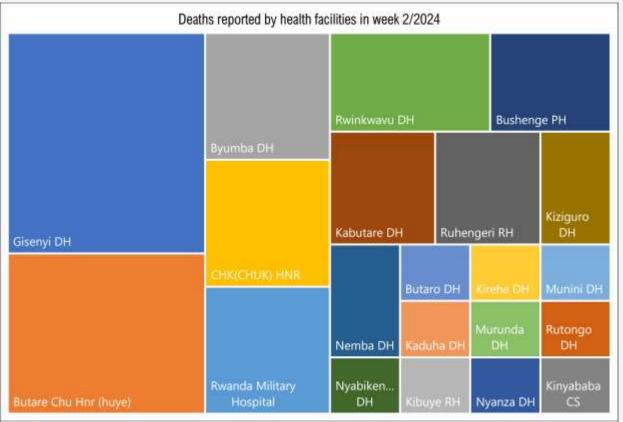


Cause of deaths declared in epi week 02

58 deaths were reported from various catchment areas as follow:

- 11 deaths were reported by Gisenyi DH: 9 were perinatal deaths and 2 under 5 years deaths.
- 8 deaths were reported by CHUB: 7 were perinatal deaths and 1 maternal death.
- 4 deaths were reported respectively by Kirehe DH: 5 perinatal deaths, 1 under 5 years death
- 5 deaths were reported respectively by CHUB (4 perinatal deaths and 1 maternal death) and CHUK (4 perinatal deaths, 1 under 5 years death)
- 4 deaths were reported respectively by Byumba DH (3 perinatal deaths, 1 under 5 years death); CHUK (1maternal death, 1 perinatal death and 2 <5 years), Rwinkwavu DH (2 maternal deaths and 2 < 5 years) Byumba DH (3 perinatal and 1<5 years)</li>
- 3 deaths were reported respectively by Bushenge DH (2 perinatal deaths and 1< 5 years), Kabutare DH (1maternal death and 2 perinatal deaths) and Ruhengeri RH (2 perinatal deaths and 1< 5 years)
- 2 were reported respectively by Kiziguro DH (1 perinatal death and 1< 5 years), and Nemba DH (all were <5 deaths)</li>

 1 death was reported respectively by Kaduha DH, Kirehe DH and Nyanza DH (each death was perinatal); and 1 < 5 years death was reported respectively by Nyabikenke DH, Butaro DH, Kibuye RH, Munini DH, Murunda DH, Rutongo DH and Kinyababa HC (in Butaro DH).



Distribution of deaths by health facilities in Epi week 02

## OUTBREAK AND EVENT UPDATES IN EPIDEMIOLOGICAL WEEK 02

## FOODBORNE ILLNESS OUTBREAK IN BURERA DISTRICT

| Confirmed cases | 0 | Date reported: | January 08, 2024     | Risk assessment | Low |
|-----------------|---|----------------|----------------------|-----------------|-----|
| Suspected cases | 9 | Source:        | eIDSR                |                 |     |
| Death(s)        | 0 | District/HFs:  | Cyanika HC/Butaro DH |                 |     |
| Total cases     | 9 | Geoscope:      | Low                  |                 |     |

## Outbreak description:

On January 08, 2024, Cyanika HC received a patient complaining headache and abdominal pain, also reporting history of vomiting and diarrhea. She reported similar symptoms among neighbors who attended the same social function on 04/01/2024, where food and Ubushera were served. The active community case search done by the Cyanika HC staff found 5 additional cases. As of 15/01/2024, the number of cases reported in e-IDSR was 9 cases. All cases were managed at health facilities and became clinically stable.

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## eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 02

In Rwanda, eIDSR reports completeness and timeliness are scored as follow:

- ♣ Between 60% and 79%: Moderate,
- Less than 60%: Low

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In the Epi Week 02, the overall completeness and timeliness of disease surveillance data reporting in Rwanda was 99% and 98%, respectively. With regards to completeness of surveillance reports, all hospitals had a high completeness (>80%). For the timeliness, almost all hospitals had a high score, except 2 hospitals that had a low sore: CHUK and Kacyiru police hospital.

**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         |               |          |  |
|---------------|--------------|----------|--------------------|---------------|----------|--|
| area          | W01/2024     | W02/2024 | Hospital catchment | area W01/2024 | W02/2024 |  |
| Nyagatare     | 100          | 100      | Nyagatare          | 93            |          |  |
| Gatunda       | 100          | 100      | Gatunda            | 100           | 1        |  |
| Ngarama       | 100          |          | Ngarama            | 100           | 1        |  |
| Kiziguro      | 100          |          | Kiziguro           | 100           | 1        |  |
| Gahini        | 100          |          | Gahini             | 100           | 1        |  |
| Rwinkwavu     | 100          |          | Rwinkwayu          | 100           |          |  |
| Kibungo       | 100          |          | Kibungo            | 94            | 1        |  |
| Kirehe        | 100          |          | Kirehe             | 100           | 1        |  |
|               | 94           |          |                    | 83            | 1        |  |
| Rwamagana     |              |          | Rwamagana          |               |          |  |
| Vyamata       | 100          |          | Nyamata            | 100           | 1        |  |
| Kinihira      | 100          |          | Kinihira           | 100           |          |  |
| Rutongo       | 100          |          | Rutongo            | 100           | 1        |  |
| Gatonde       | 100          |          | Gatonde            | 100           | 1        |  |
| Butaro        | 100          |          | Butaro             | 100           |          |  |
| Ruli          | 100          |          | Ruli               | 100           | Í        |  |
| lemba         | 100          | 100      | Nemba              | 100           |          |  |
| Ruhengeri     | 100          | 100      | Ruhengeri          | 94            |          |  |
| Byumba        | 100          | 100      | Byumba             | 100           |          |  |
| СНИВ          | 100          | 100      | СНИВ               | 100           |          |  |
| Kabutare      | 100          | 100      | Kabutare           | 95            |          |  |
| Kabgayi       | 100          | 100      | Kabgayi            | 100           |          |  |
| Kibilizi      | 100          |          | Kibilizi           | 100           |          |  |
| Gakoma        | 100          |          | Gakoma             | 83            |          |  |
| Gitwe         | 100          |          | Gitwe              | 100           |          |  |
| Ruhango       | 100          |          | Ruhango            | 100           |          |  |
| Remera Rukoma | 100          |          | Remera Rukoma      | 100           |          |  |
|               | 100          |          |                    |               |          |  |
| Vyanza        |              |          | Nyanza             | 95            |          |  |
| Kigeme        | 100          |          | Kigeme             | 100           |          |  |
| Kaduha        | 100          |          | Kaduha             | 100           |          |  |
| Munini        | 100          |          | Munini             | 100           |          |  |
| Bushenge      | 100          |          | Bushenge           | 100           |          |  |
| Kibogora      | 100          | 100      | Kibogora           | 100           |          |  |
| Kibuye        | 100          | 100      | Kibuye             | 100           |          |  |
| Kirinda       | 100          | 100      | Kirinda            | 100           |          |  |
| Mugonero      | 100          | 100      | Mugonero           | 100           |          |  |
| Shyira        | 88           | 100      | Shyira             | 88            |          |  |
| Muhororo      | 100          | 100      | Muhororo           | 100           |          |  |
| Kabaya        | 100          | 100      | Kabaya             | 100           |          |  |
| Gihundwe      | 100          | 100      | Gihundwe           | 100           | -        |  |
| Aibilizi      | 100          |          | Mibilizi           | 100           |          |  |
| Gisenyi       | 100          |          | Gisenyi            | 94            |          |  |
| Murunda       | 95           |          | Murunda            | 95            |          |  |
| CHUK          | 100          |          | CHUK               | 100           |          |  |
|               | 89           |          | Nyarugenge         | 89            |          |  |
| lyarugenge    | 100          |          |                    | 100           |          |  |
| Muhima        |              |          | Muhima             |               |          |  |
| MH .          | 0            |          | RMH                | 0             |          |  |
| Masaka        | 92           |          | Masaka             | 92            |          |  |
| Kigababaga    | 95           |          | Kigababaga         | 80            |          |  |
| Kacyiru       | 100          |          | Kacyiru            | 100           |          |  |
| (FH           | 0            | 100      | KFH                | 0             |          |  |
| Caraes Ndera  | 100          | 100      | Caraes Ndera       | 0             |          |  |
| Vyabikenke    | 100          | 100      | Nyabikenke         | 100           |          |  |
| Rwanda        | 99           | 99       | Rwanda             | 97            |          |  |