



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 19 – 2023

(08 – 14 May 2023)

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 19

Event Based Surveillance (EBS) Highlights:

- During epidemiological week 19, no alert was notified through the electronic Community Event Based Surveillance System (eCBS).
- Two alerts were received through Epidemic Intelligence from Open Source (EIOS):
 - ❖ Nine dead as unknown disease breaks out in Marsabit. (Kenya)
 - ❖ Four countries report more vaccine-derived polio cases. (Bangladesh, Democratic Republic of the Congo, Somalia, Chad)

Indicator Based Surveillance (IBS) Highlights:

- 62 immediate reportable diseases were notified by health facilities countrywide. They include cases of foodborne illness, acute flaccid paralysis (AFP), mumps, severe malaria; bloody diarrhea, measles/rubella, and typhoid fever.
- 8 weekly reportable diseases and health events that 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, are being reported on a weekly basis. A thorough analysis conducted for Epi Week 18 revealed that, all were below the epidemic threshold, indicating that there was no outbreak caused by these diseases during that Epi Week 19.
- A total of 55 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. The majority of deaths were classified as perinatal and deaths of children under the age of 5.

Ongoing outbreaks

In Epi Week 19, there were two outbreaks in Rwanda, one new outbreak and one ongoing:

1. Foodborne illness outbreak in Rwamagana district (new)
2. Measles outbreak in Kirehe district (ongoing)

Other health event updates

The occurrence of floods and landslides caused by heavy rainfall occurred on 2nd May 2023 in Rwanda. It has affected 10 districts in Northern, Southern and Western Province s. As of 19th May 2023, 135 deaths, 134 buried, 1 missing, 111 injured, 12 hospitalized, 99 discharged, have been reported from the three provinces. In addition, a total of 5174 households have been destroyed by the floods. Deaths: 135

Completeness and timeliness

In Epi Week 19, the overall completeness and timeliness of reporting in Rwanda was 93% and 91%, respectively.

WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 19

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 EVENT BASED SURVEILLANCE

During the Epi week 19, no alert received from community.

MEDIA SCAN

During the Epi week 19, two outbreak were detected through EIOS: Two alerts were received through Epidemic Intelligence from Open Source (EIOS):

- ❖ One dead as unknown disease breaks out in Marsabit. (Kenya)
<https://www.k24tv.co.ke/news/9-dead-as-unknown-disease-breaks-out-in-marsabit-102826/>
- ❖ Four countries report more vaccine-derived polio cases. (Bangladesh, Democratic Republic of the Congo, Somalia, Chad). <https://gphin.canada.ca/cepr/showarticle.jsp?docId=1013915094>

Alerts description

| Source | Alert | # of alerts |
|--------|---|-------------|
| eCBS* | none | 0 |
| EIOS* | Unknown disease in Kenya Vaccine-derived polio cases | |

*eCBS: electronic Community Event Based Surveillance

*EIOS: Epidemic Intelligence from Open Source

Description: Rwanda has been implemented Indicator Based Surveillance according to the IDSR 3rd guidelines 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 a weekly basis, every Monday before midday.

During the Epi week nineteen, 62 cases and suspected cases for immediate reportable diseases were notified:

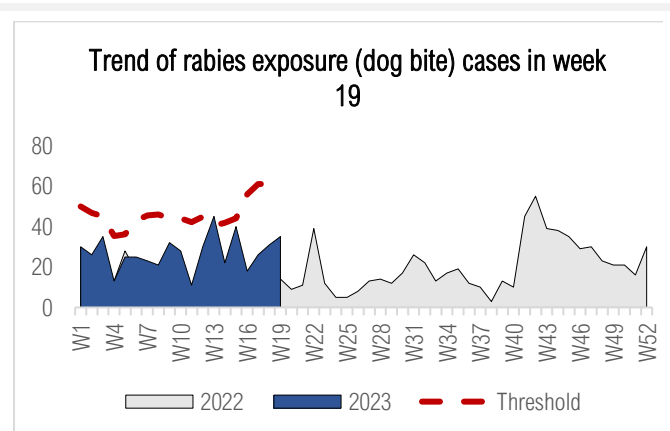
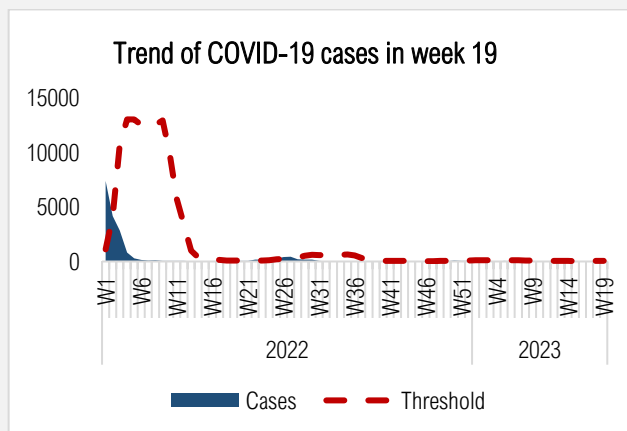
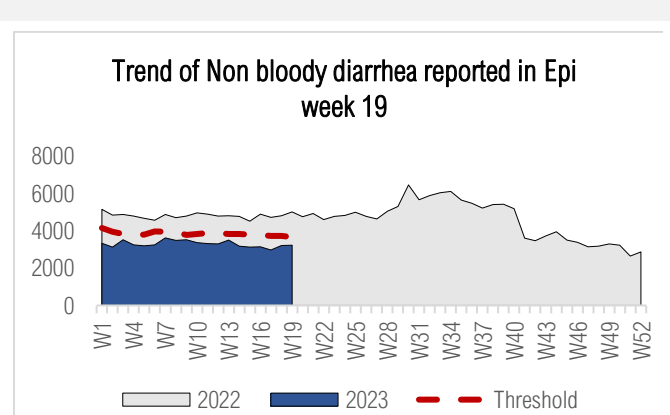
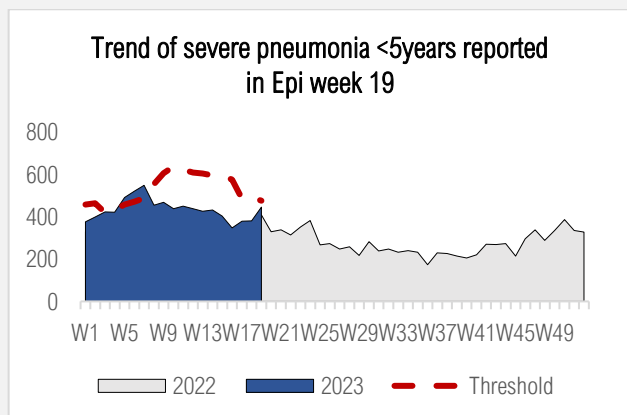
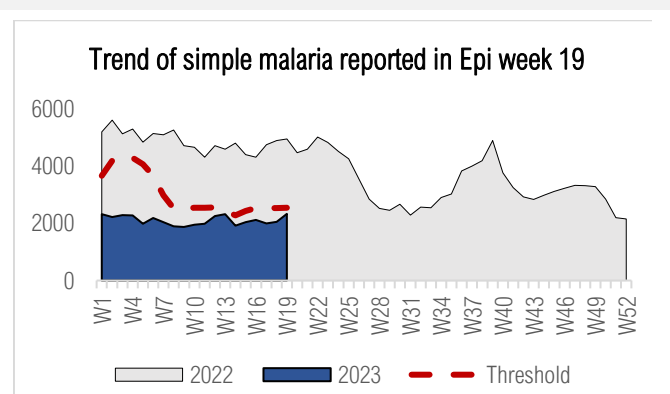
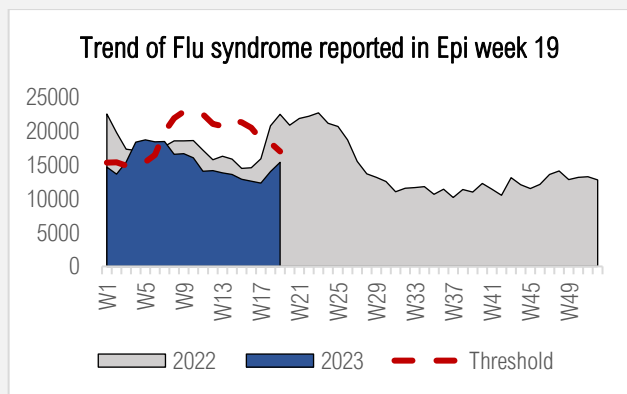
- Notes:** For the diseases requiring laboratory confirmation, samples were collected and sent to the National Reference Laboratory for testing. Meanwhile cases/suspected cases had been managed at the health facility level.



B. WEEKLY REPORTABLE DISEASES – EPI WEEK 19

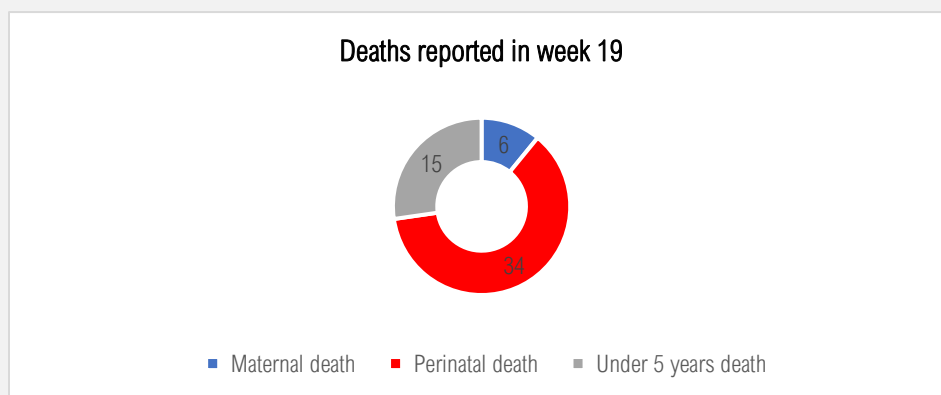
Description: In Rwanda, after the adaptation of the IDSR 3rd edition, eight diseases & events are being reported and analyzed on a weekly basis. These include flu syndrome, simple malaria, severe pneumonia for under 5 years, non-bloody diarrhea for under 5 years, COVID-19, dog bites, brucellosis, and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

In Epi Week 19, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to the epidemic thresholds. The results of the analysis revealed that all weekly reportable diseases were below their respective epidemic thresholds. This indicates that there were no outbreaks of these diseases during epi week 18.



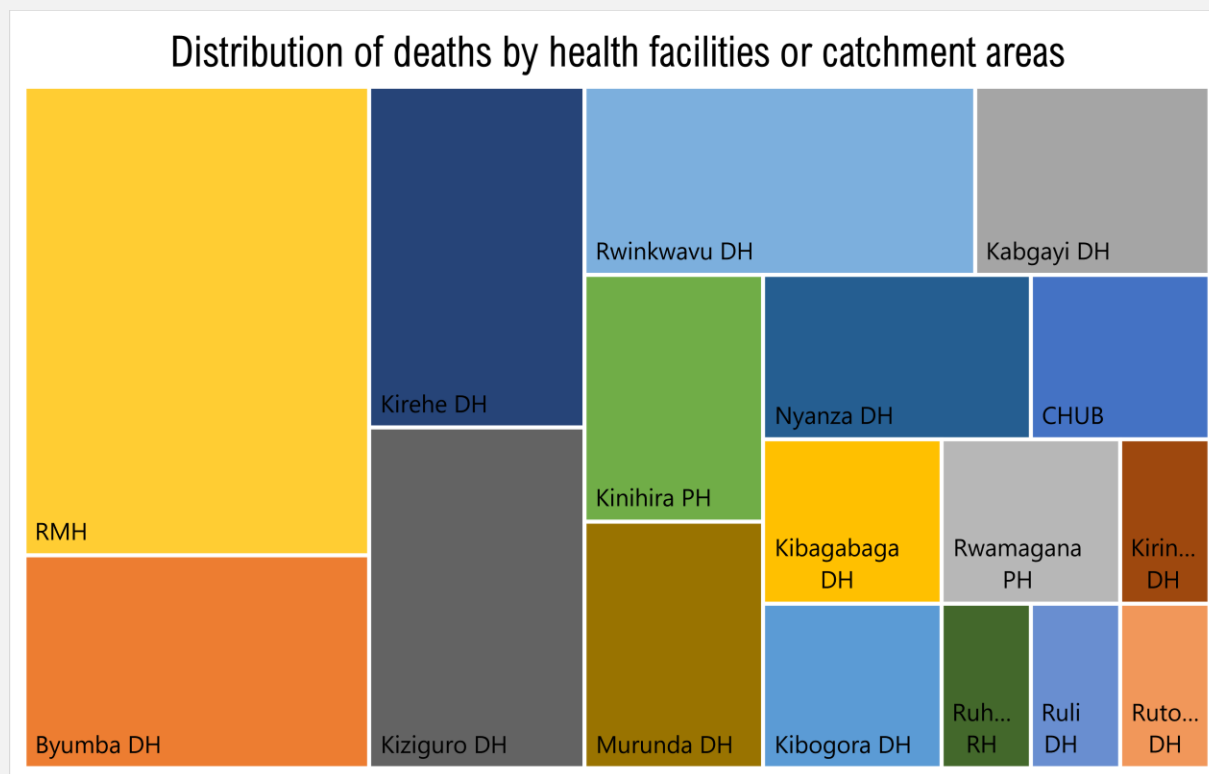
C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 19

In Epi week 19, as summarized in the chart below, a total number of 55 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 34 (62%) were classified as perinatal, 15 (27%) were deaths of children under 5 years old, 6 (11%) were maternal deaths.



Cause of deaths declared in epi week 19

Deaths were reported from various catchment areas as follow: 11 deaths in RMH; 5 in Kiziguro DH, Byumba DH, Kirehe DH, Rwinkwavu DH, 3 in Nyanza DH, Kinihira DH, Murunda DH, Kabgayi, 2 deaths reported in CHUB, Kibagabaga DH, Kibogora DH, Rwamagana PH, 1 death reported in Ruli DH, Ruhango PH, Rutongo DH, Kirinda DH. (See figure below).



OUTBREAK AND EVENT UPDATES

EPIDEMIOLOGICAL WEEK 19

1. FOODBORNE ILLNESS OUTBREAK AT RWAMAGANA DISTRICT

| | | | | | |
|------------------|----|----------------|--------------|-----------------|-----|
| Confirmed cases: | 11 | Date reported: | MAY 13, 2023 | Risk assessment | Low |
| Suspect cases: | 0 | Source: | Rwamagana DH | | |
| Death(s): | 1 | District: | Rwamagana | | |
| Total cases: | 11 | Geoscope: | Low | | |

Outbreak description: On 13 May 2023, thirteen (11) cases from Rwamagana district, have been admitted at Rwamagana DH presenting Diarrhea, vomiting, abdominal pain starting from 13/05/2023 after consuming the juice in the household of one family. The stool samples were collected for testing. Two patients have been improved and have been discharged after two days of hospitalization, while one died and 10 remained hospitalized on 13 May 2023.

Interventions for foodborne illnesses

- Case management at health facilities
- Outbreak investigation

MEASLES OUTBREAK

| | | | | | |
|-----------------|------------|----------------|-------------------|-----------------|-----|
| Confirmed cases | 8 | Date reported: | February 27, 2023 | Risk assessment | Low |
| Epi link cases | 44 (1 new) | Source: | NRL, eIDSR | | |
| Death(s) | 0 | District: | Kirehe | | |
| Total cases | 52 | Geoscope: | Low | | |

Outbreak description: The measles outbreak is still ongoing in Kirehe district since 27th February 2023. During Epi Week 19; three additional cases were identified in Mahama Refugee camp by epidemiological link making it a total of 8 laboratory confirmed cases and 47 cases confirmed by epidemiological link.

Ongoing interventions

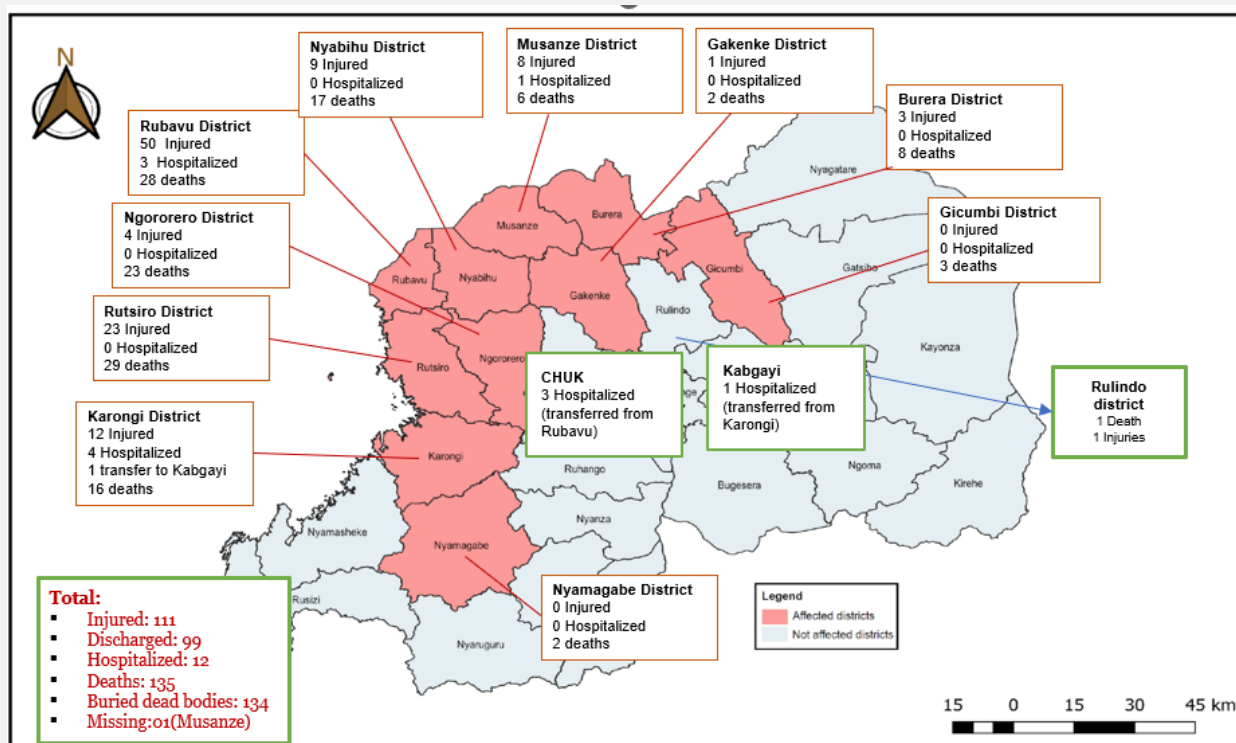
- Continuous active cases search
- Case management (treatment, isolation)
- Vaccination

3. OTHER EVENT UPDATES: FLOOD AND LANDSLIDES IN RWANDA

| | | | | | |
|--------------|-----|----------------|-----------------------------|-----------------|----------|
| Injured | 111 | Date reported: | May,3 2023 | Risk assessment | Moderate |
| Hospitalized | 12 | Source: | MINEMA | | |
| Discharged | 99 | Provinces | Western, Northern, Southern | | |
| Death(s) | 135 | Geoscope: | Moderate | | |

Event description: The ministry in charge of emergency management (MINEMA) reported the occurrence of floods and landslides caused by heavy rainfall which occurred on 2nd May 2023. The floods and landslides affected 10 districts in the Northern, Southern and Western of the country.

As of 19th May 2023, 135 deaths, 134 burried,1 missing ,111 injured,12 hospitalized, 99 discharged, have been reported from the three provinces. In addition, a total of 5174 households have been destroyed by the floods. Deaths: 135



Distribution of injuries and deaths as of 19th May 2023

Rutsiro district has the highest number of deaths (29), seconded by Rubavu district (28 deaths), then Nyabihu and Karongi districts that reported respectively 17 and 16 deaths. The six remaining districts had less than 10 deaths.

For injuries, Rubavu district has the highest number of injured persons: 50, seconded by Rutsiro that counts 23 injuries and other affected districts have ≤ 12 injuries.



Ongoing interventions

MINEMA activated a command center that coordinates the response. Some measures taken include:

- Evacuation and temporary relocation of residents from the high-risk areas,
- Provision of food, and other basic supplies to displaced persons.
- Daily management of people in temporary sites.

eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 19

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 Epi Week 19, the overall completeness and timeliness of reporting in Rwanda were 93% and 91%, respectively. With regards to report completeness, many DH catchment areas that had a score greater than 80%, but there the hospitals that scored moderate score: Gakoma, Ruhango and Shyira, had respectively 67%,75%,76%; while two hospitals did not report: Kacyiru and King Faysal hospital.

As for timeliness, the overall score was moderate: 91%, some hospitals catchment areas scored a the greater than 80%, but others had moderate score: Gakoma, Ruhango,Shyira and Nemba. The hospitals that scored low seen were Kacyiru and King Faysal hospital. See on the figure below.

Notes: it is important to note the health facilities that did not performed are recommended to improve their reporting by providing complete reports on time in order to achieve effective surveillance and early detection of outbreaks. Details, on completeness and timeliness for all health facilities are confined in the figure below.

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