



WEEKLY EPIDEMIOLOGICAL BULLETIN WEEKLY EPIDEMIOLOGICAL BULLETIN

(05-11 June 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.

Authors: Public Health Surveillance & Emergency Preparedness and Response Division

KEY EPIDEMIOLOGICAL HIGHLIGHTS EPIDEMIOLOGICAL WEEK 23

Event Based Surveillance (EBS) Highlights:

- During epidemiological week 23, eight alerts were notified through the electronic Community Event Based Surveillance System (eCBS): 8 human deaths occurred and 2 dog bite.
- Alerts received through Epidemic Intelligence from Open Source (EIOS):

Marburg Virus Disease outbreak in Equatorial Guinea ends.

Indicator Based Surveillance (IBS) Highlights:

- o 74 immediate reportable diseases were notified by health facilities countrywide. They included cases of acute flaccid paralysis (AFP), mumps, severe malaria; bloody diarrhea, measles/rubella and chicken pox.
- o 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 23 revealed that, simple malaria cases and non-bloody diarrhea for the children under 5 years increased and crossed the epidemic threshold. This is indicating that there is a possible outbreak of simple malaria and non-bloody diarrhea. A deep investigation is needed to confirm and identify possible affected areas and recommendations aimed to reduce the cases in concerned areas.
- A total of 68 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 23, there was one outbreak in Rwanda, identified in Kirehe and Gatsibo districts:

Ongoing Measles outbreak in Kirehe District.

Other health event updates

The occurrence of floods and landslides caused by heavy rainfall occurred on 2nd May 2023 in Rwanda. As of 16th June 2023, all people who were evacuated and temporary relocated in different sites had been evacuated from the sites and supported for obtaining the houses to rent in community, while the rehabilitation and construction of their houses are ongoing.

Completeness and timeliness

In Epi Week 23, the overall completeness and timeliness of reporting in Rwanda was 98% and 94%, respectively.

WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 23

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 23, eight alert were received from community:

- 6 Human Deaths:
- ❖ Two children of 2 and 3 years old, Male and Female respectively from Kinyaga village, Gihaya Cell, Gihundwe Sector, Rusizi district passed away on 04/06/2023. They got drown in the river and had no other known illness.
- ❖ A child of 7 months old, Male from Gatovu village, Cyangugu cell, Kamembe sector, Rusizi District passed away on 06/06/2023. He developed shortness of breath and passed away on the way to the health facility.
- ❖ A woman of 67 years old, from Karambi village, Tyazo Cell, Rugabano Sector, Karongi district passed away on 09/06/2023. The cause of death was unknown.
- ❖ A child of 2-year-old, Male from Kamutongo village, Tara cell, Mururu sector, Rusizi District passed away on 10/06/2023. The cause of death was unknown.
- An elder of 97 years old, Female from Rutete village, Taba Cell, Kiyomve Sector, Nyagatare district passed away on 09/06/2023. The cause of death was unknown.
- 2 cases of dog bite:
- ❖ A 7-years-old, Male from Batura village, Karenge cell, Rwimbogo sector, Rusizi District was bitten by a dog on 06/06/2023. He was transferred to Mibilizi DH for further management and anti-rabic vaccines.
- ❖ A 14-years-old, Female from from Kiziba Camp in Gasharu village, Nyarusange cell, Rwankuba Sector, Karongi district was bitten by a dog on 05/06/2023. She was transferred to Kibuye RH for further management and anti-rabic vaccines.

MEDIA SCAN

During the Epi week 23, alert was received through Epidemic Intelligence from Open Source (EIOS):

Marburg Virus Disease outbreak in Equatorial Guinea ends. https://www.afro.who.int/countries/equatorial-guinea/news/marburg-virus-disease-outbreak-equatorial-guinea-ends.

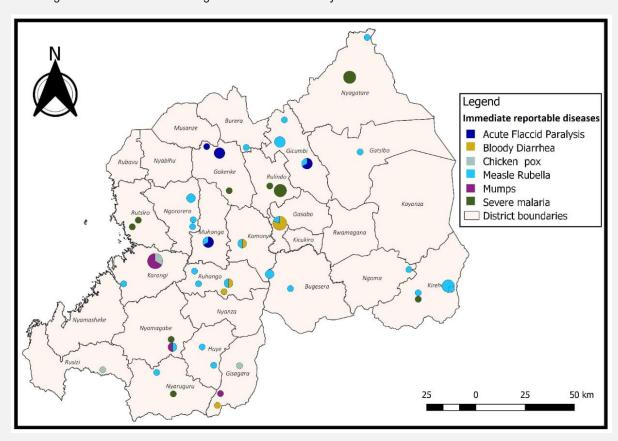
WEEKLY UPDATES ON INDICATOR BASED SURVEILLANCE (IBS) EPIDEMIOLOGICAL WEEK 23

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.

A. IMMEDIATE REPORTABLE DISEASES – EPI WEEK 23

During the Epi week 23; 74 suspected cases for immediate reportable diseases were notified, including 33 suspect cases of measles/rubella,15 confirmed cases of severe malaria, 8 suspected cases of bloody diarrhea, 8 suspected cases of acute flaccid paralysis, 6 cases of mumps,4 cases of chicken pox. (See figure below).

Notes: For the diseases requiring laboratory confirmation, samples were collected and sent to the National Reference Laboratory for testing. In the previous week 28 suspected cases of Measle/Rubella were tested negative, 3 cases were confirmed positive. Meanwhile malaria confirmed cases and suspected cases for the remining diseases had been managed at the health facility level.

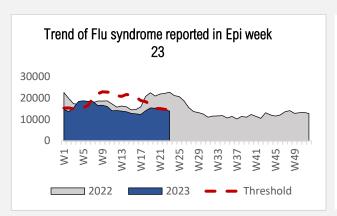


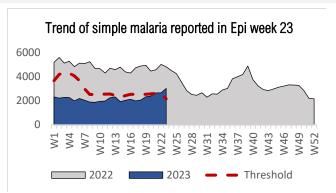
Distribution of immediate reportable diseases in Epi week 23

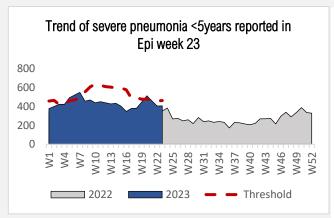
B. WEEKLY REPORTABLE DISEASES – EPI WEEK 23

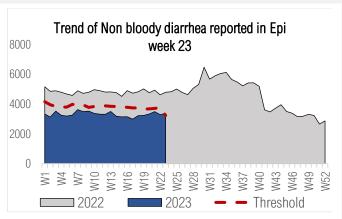
Description: In Rwanda, after the adaptation of the IDSR 3rd edition, eight diseases & events are being reported and analyzed on a weekly basis. These include flu syndrome, simple malaria, severe pneumonia for under 5 years, non-bloody diarrhea for under 5 years, COVID-19, dog bites, brucellosis, and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

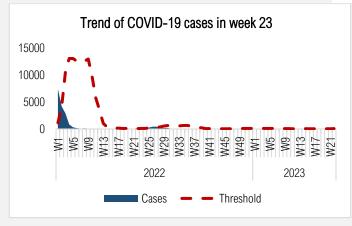
In Epi Week 23, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to the epidemic thresholds. The results of the analysis revealed that among weekly reportable diseases, simple malaria and non-bloody diarrhea for children under 5 years crossed the respective epidemic threshold. This indicates that deep investigation is needed and take actions in order to reduce them.

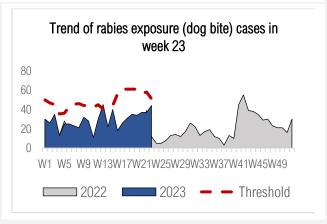






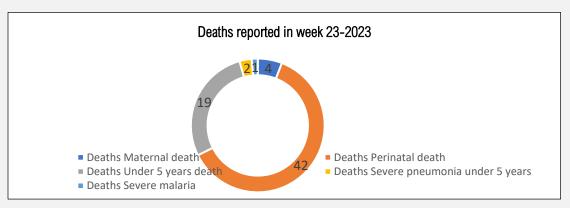






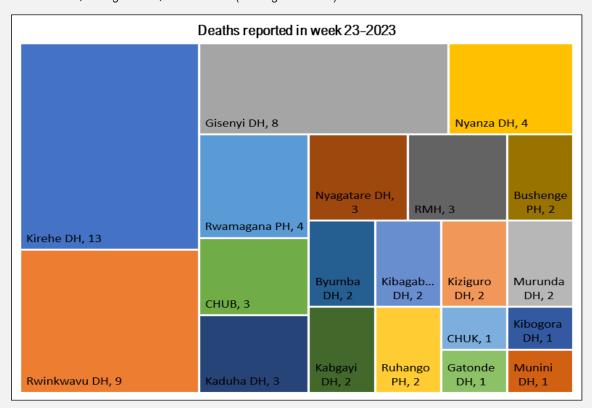
C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 23

In Epi week 23, as summarized in the chart below, a total number of 68 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 42 (62%) were classified as perinatal, 19 (28%) deaths of children under 5 years old, 4(6%) maternal deaths, 2(3%) deaths due to severe pneumonia for under 5 years children and 1(1%) death due to sever malaria.



Cause of deaths declared in epi week 23

Deaths were reported from various catchment areas as follow: 13 deaths in Kirehe DH, 9 deaths in Rwinkwavu DH, 8 deaths in Gisenyi DH, 4 deaths reported in each of the following hospitals: Nyanza DH and Rwamagana PH; 2 deaths reported in each of the following hospitals: CHUB, Nyagatare DH, Kaduha DH and Rwanda military hospital; 2 deaths reported in each of the following hospitals: Bushenge PH, Byumba DH, Kabgayi DH, Kiziguro, Murunda DH, Ruhango PH and Kibagabaga DH; 1 death reported in each of the following hospitals: CHUK, Gatonde DH, Kibogora DH, Munini DH. (See figure below).





MEASLES OUTBREAK

Confirmed cases	17	Date reported:	February 27, 2023	Risk assessment	Low
Epi link cases		Source:	NRL, eIDSR		
Death(s)	0	District:	Kirehe		
Total cases	74	Geoscope:	Low		

Outbreak description: The measles outbreak is still ongoing in Kirehe district since 27th February 2023. During Epi Week 23; 3 additional cases were confirmed in Mahama Refugee camp by laboratory confirmation, which makes it a total of 17 laboratory confirmed cases and 57 cases confirmed by epidemiological link.

Ongoing interventions

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

OTHER EVENT UPDATES: FLOOD AND LANDSLIDES IN RWANDA

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. That disaster affected 10 districts in the Northern, Southern and Western of the country. As health effect, this disaster caused 135 deaths and 111 injured. In addition, a total of 5174 households have been destroyed by the floods.

As of 16th June 2023, all people who were evacuated and temporary relocated in different sites had been evacuated from the sites and supported for obtaining the houses to rent in the community, while the rehabilitation and construction of their houses are ongoing.

eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 23

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 23, the overall completeness and timeliness of reporting in Rwanda were 98% and 89%, respectively. With regards to report completeness, almost all DH catchment areas had a score greater than 80%, except one hospital that had moderate score for completeness: Shyira DH had 76%.

As for timeliness, the overall score was: 89%, many hospitals catchment areas had the score greater than 80%, but two hospitals had a moderate score: Shyira DH and Kinihira PH that had respectively 76 and 67%; while 3 hospitals had a very low score: CHUB, King Faysal hospital and Rwanda Military hospital.

Notes: it is important to note that the health facilities which did not perform 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.

