



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 18 – 2023

(01 – 07 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 18

Event Based Surveillance (EBS) Highlights:

- During epidemiological week 18, two alerts were notified through the electronic Community Event Based Surveillance System (eCBS). All were human deaths.
- One alert of Cholera outbreak in DRC. was received through Epidemic Intelligence from Open Source (EIOS),

Indicator Based Surveillance (IBS) Highlights:

- 119 immediate reportable diseases were notified by health facilities countrywide. They include cases of foodborne illness, acute flaccid paralysis (AFP), mumps, severe malaria; bloody diarrhea and suspect cases of cholera, 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 18.
- A total of 62 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 18, there were three outbreaks in Rwanda, two new outbreaks and one ongoing:

1. Foodborne illness outbreak in Gicumbi district (new)
2. Foodborne illness outbreak in Nyarugenge district (new).
3. 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 10th May 2023, 135 deaths, 2 missing ,109 injured,19 hospitalized, 90 discharged, 3 transfers have been reported from the three provinces. In addition, a total of 5174 households have been destroyed by the floods.

Completeness and timeliness

In Epi Week 18, the overall completeness and timeliness of reporting in Rwanda were 94% and 71%, respectively.

WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 18

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.

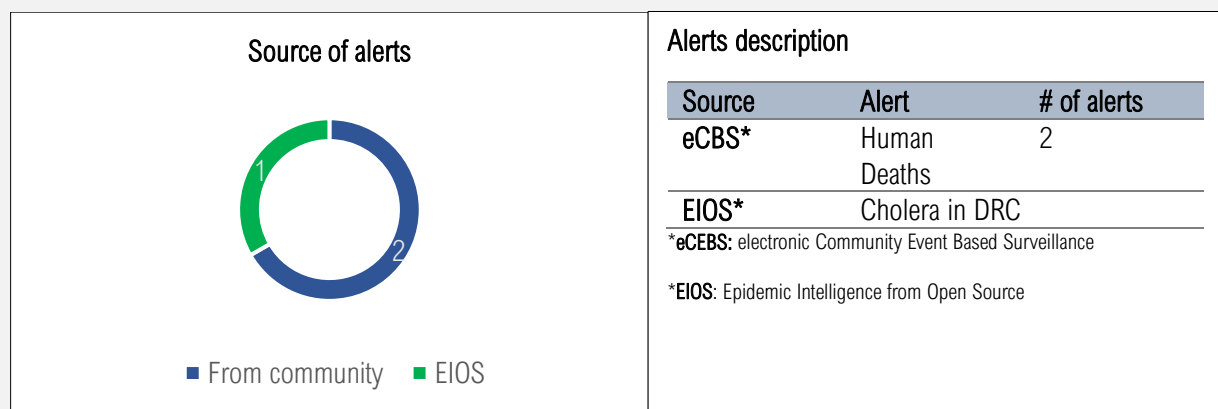
COMMUNITY EVENT BASED SURVEILLANCE

During the Epi week 18, two (2) alerts of human deaths were notified through the eCBS as described below:

- A 78-years-old, Male from Rulindo district, Kinyira Sector, Buyoga Cell, Ndarage Village passed away on 01/05/2023. The cause of death was unknown.
- A-71-years-old, Male from Musanze district, Gashaki Sector, Muharura cell and Kibinyogote village passed away on 1/05/2023. He was known to having high blood pressure.

MEDIA SCAN

During the Epi week 18, an outbreak of cholera in DRC was detected through EIOS: <https://www.mesvaccins.net/web/news/20761-republique-democratique-du-congo-plus-de-300-cas-de-cholera-dont-11-deces-notifies-en-2-semaines-a-lubumbashi>



Health Events detected according to type of EBS in epi week 18

WEEKLY UPDATES ON INDICATOR BASED SURVEILLANCE (IBS) EPIDEMIOLOGICAL WEEK 18

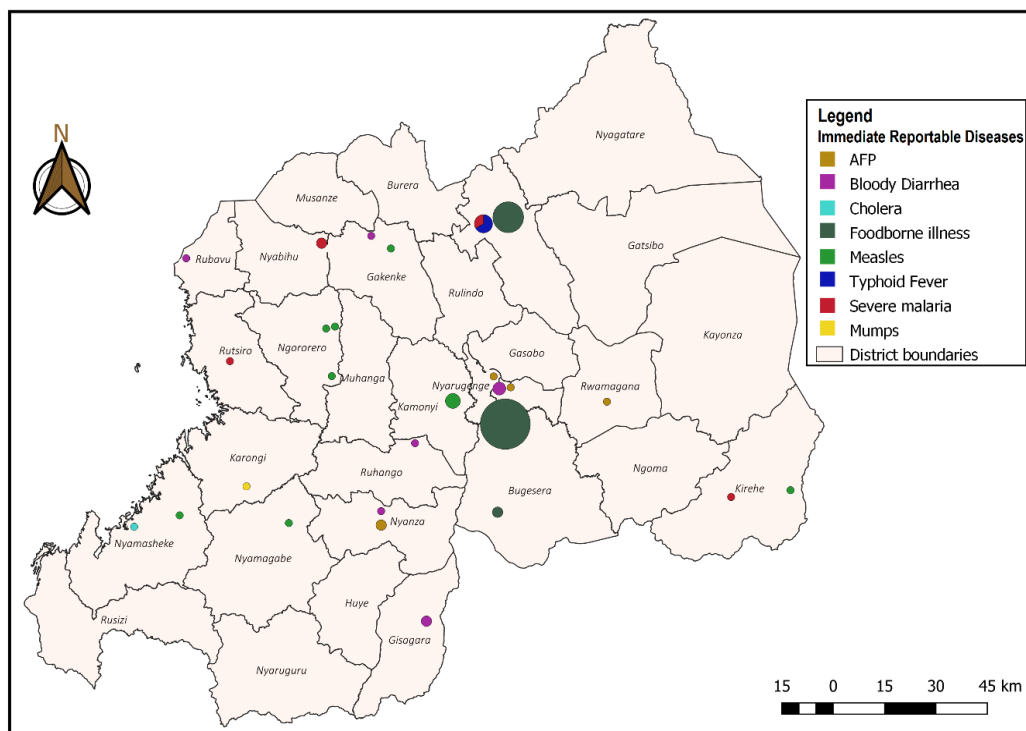
Description: Rwanda has been implemented Indicator Based Surveillance according to the IDSR 3rd guidelines where approximately 45 priority diseases, health conditions and public health events are being monitored and reported from health facilities countrywide on a regular basis. Diseases that are prone 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 18

During the Epi week eighteen, 119 cases and suspected cases for immediate reportable diseases were notified:

- 69 cases of foodborne illness, 16 suspect case of Typhoid fever, 11 suspect cases of measles/rubella, 9 cases of bloody diarrhea, 6 confirmed cases of severe malaria, 6 acute flaccid paralysis, 1 case of mumps and 1 suspected case of cholera.

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.

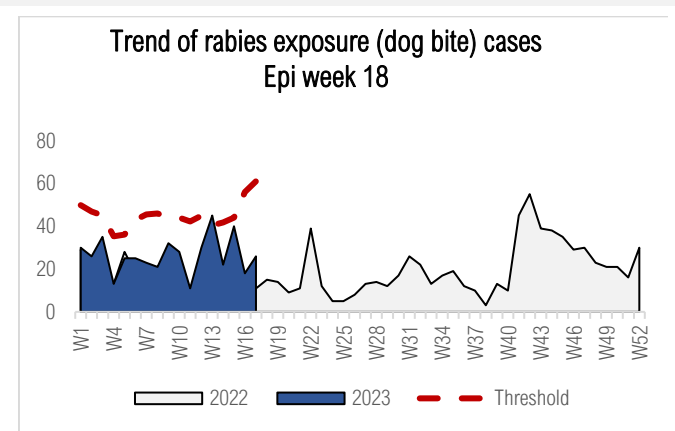
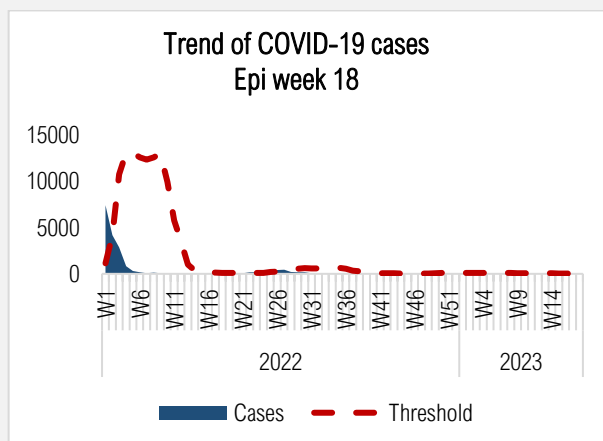
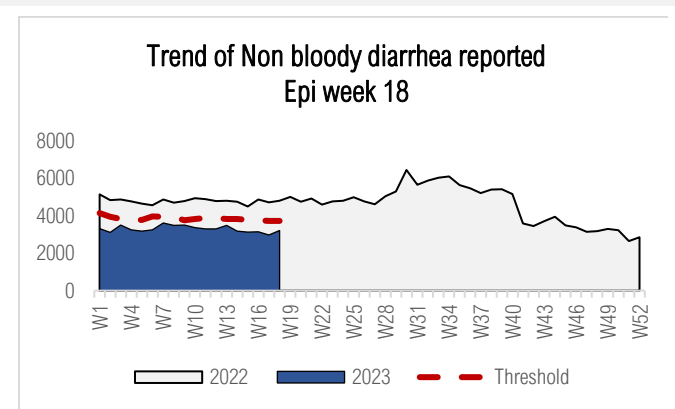
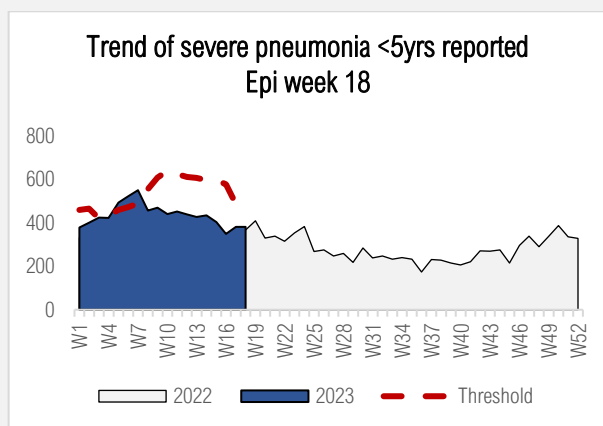
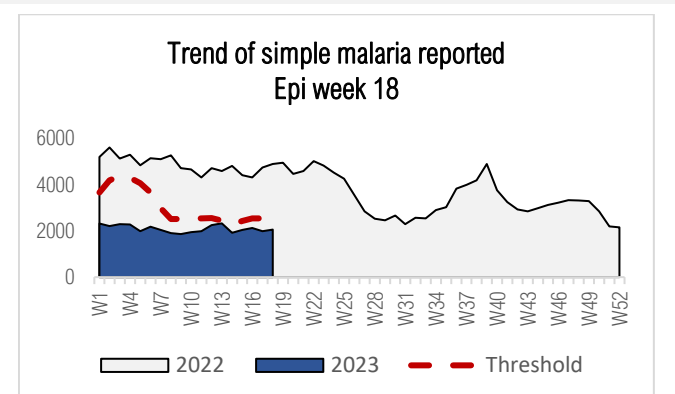
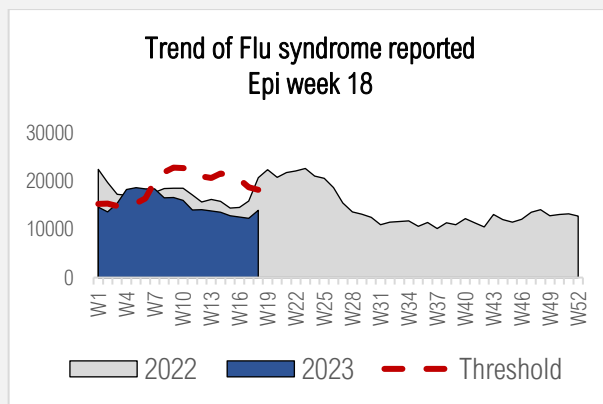


Distribution of immediate reportable diseases in Epi week 18

B. WEEKLY REPORTABLE DISEASES – EPI WEEK 18

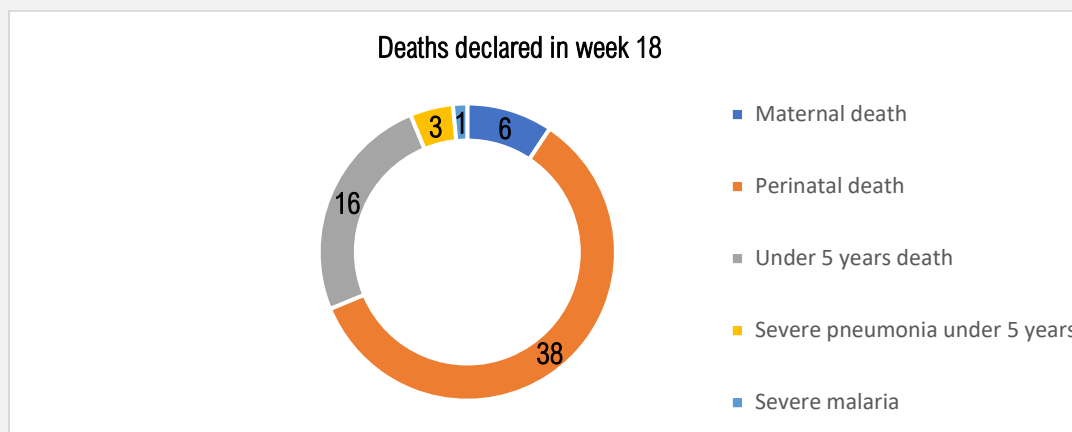
Description: In Rwanda, after the adaptation of the IDSR 3rd edition, eight diseases & events are being reported and analyzed on a weekly basis. These include flu syndrome, simple malaria, severe pneumonia for under 5 years, non-bloody diarrhea for under 5 years, COVID-19, dog bites, brucellosis, and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

In Epi Week 18, 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.



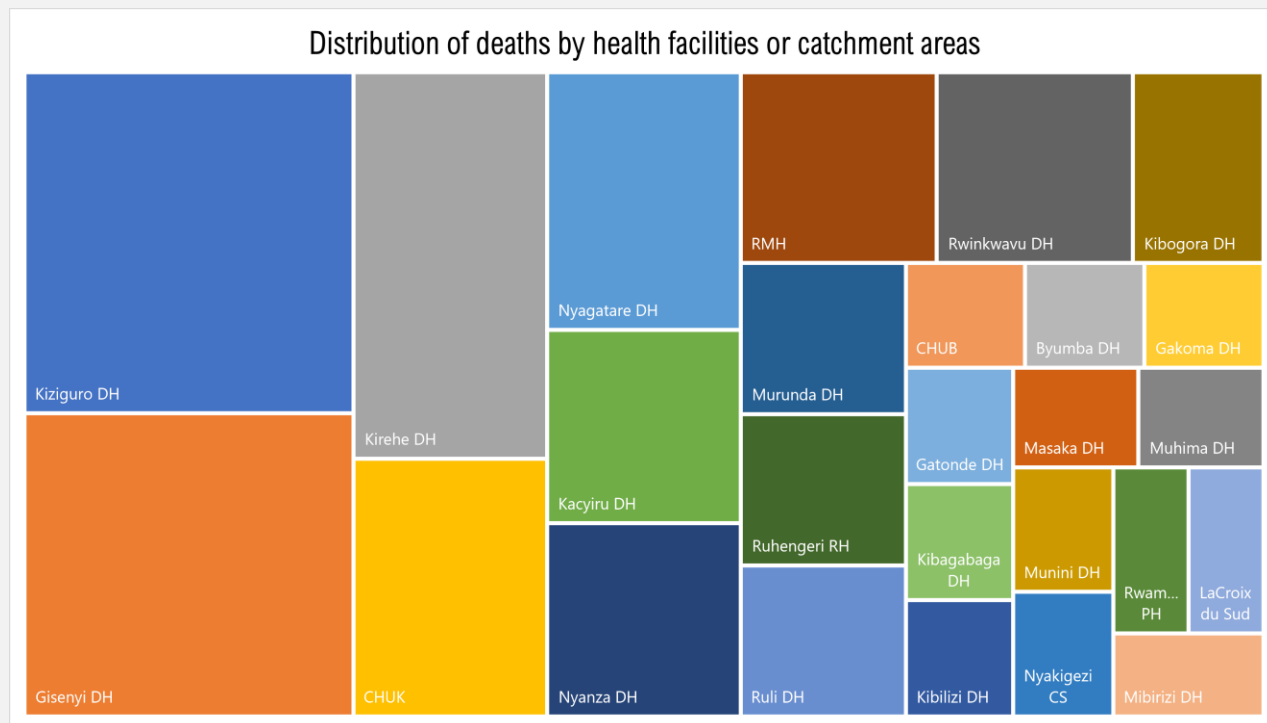
C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 18

In Epi week 18, as summarized in the chart below, a total number of 63 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 38 (60%) were classified as perinatal, 16 (25%) were deaths of children under 5 years old, 6 (9%) were maternal deaths, 3 (5%) was due to severe pneumonia in children under 5 years old, 1 (2%) due to severe malaria.



Cause of deaths declared in epi week 18

Deaths were reported from various catchment areas as follow: 9 deaths in Kiziguro DH, 8 in Gisenyi DH, 6 Kirehe DH, 4 deaths in CHUK and Nyagatare DH, 3 deaths in RMH, Nyanza, Rwinkwavu, and Kacyiru Police hospital, 2 deaths reported in Murunda DH, Ruhengeri RH and Ruli DH, 1 death in Kibogora DH (1 child <5 had severe pneumonia and was reported in two categories, CHUB, Byumba DH, Gatonde DH, Kibagabaga DH, Kibirizi DH, Munini DH, Muhima DH, Rwamagana PH, Croix du Sud, Mibilizi DH and Nyakigezi HC (See figure below).



OUTBREAK AND EVENT UPDATES

EPIDEMIOLOGICAL WEEK 18

1. FOODBORNE ILLNESS OUTBREAK AT BYUMBA DISTRICT

Confirmed cases:	13	Date reported:	MAY 1st, 2023	Risk assessment	Low
Suspect cases:	0	Source:	Byumba DH(5) Gicumbi HC(8)		
Death(s):	0	District:	Gicumbi		
Total cases:	13	Geoscope:	Low		

Outbreak description: On 1st May 2023, thirteen (13) cases from Gicumbi district, Byumba sector, Gacurabwenge cell, Rwasama village have been admitted at Gicumbi Health Center (8) and (5) at Byumba DH presenting Diarrhea, vomiting, and abdominal pain starting from 30/04/2023 after consuming sorghum beer / ubushera. Three stool samples were collected for culture. All 13 patients have been improved and have been discharged after two days of hospitalization.

2. FOODBORNE ILLNESS OUTBREAK IN NYARUGENGE DISTRICT.

Confirmed cases:	45	Date reported:	May 6th, 2023	Risk assessment	Low
Suspect cases:	0	Source:	Nyarugenge DH		
Death(s):	0	District:	Nyarugenge		
Total cases:	45	Geoscope:	Low		

Outbreak description: On 6th May 2023, 99 students out of 117 took lunch (Maize, Beans, and vegetables) at the school dining hall and 4hours later, 45 reported to be sick presenting nausea, vomiting and abdominal pain. All cases were immediately taken to Butamwa HC and then all cases were transferred to Nyarugenge DH for further management. One vomit sample was collected by Nyarugenge DH and sent to Rwanda Forensic laboratory (RFL) for toxicology. On 07th May 2023, All admitted 45 cases recovered and had been discharged. Toxicological screen of vomit collected revealed the presence of 4-bromo-2- chlorophenol, a metabolite of Profenofos, an insecticide used on a wide variety of crops to control pests.

Interventions for foodborne illnesses

- Case management at health facilities
- Outbreak investigation

3. 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 18; one additional case was identified in Mahama Refugee camp by epidemiological link making it a total of 8 laboratory confirmed cases and 44 cases confirmed by epidemiological link.

Ongoing interventions

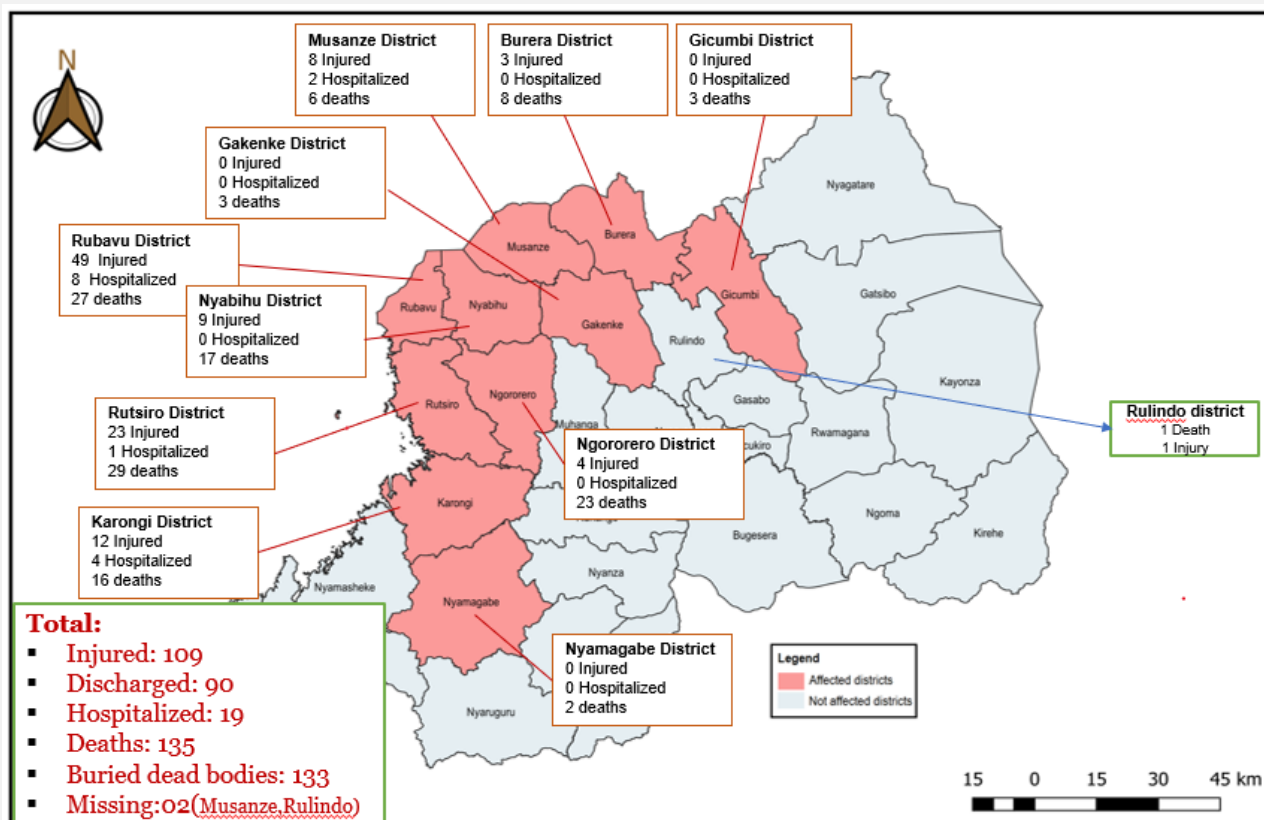
- Continuous active cases search
- Case management (treatment, isolation)
- Vaccination

4. OTHER EVENT UPDATES: FLOOD AND LANDSLIDES IN RWANDA

Injured	109	Date reported:	May,3 2023	Risk assessment	Moderate
Hospitalized	19	Source:	MINEMA		
Discharged	87	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 10th May 2023, 135 deaths with 133 buried dead bodies, 2 missing (Musanze and Rulindo), 109 injured, 19 hospitalized, 90 discharged, 3 transferred have been reported from the three provinces. In addition, a total of 5174 households have been destroyed by the floods.



Distribution of injuries and deaths as of 10th May 2023

Rutsiro district has the highest number of deaths (29), seconded by Rubavu district (27 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: 49, 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 18

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 18, the overall completeness and timeliness of reporting in Rwanda were 96% and 94%, respectively. With regards to report completeness, almost all DH catchment areas had a score greater than 80%, except Gahini DH that had a moderate score.

As for timeliness, the overall score was moderate: 94%, almost all district hospitals catchment areas scored a the greater than 80%, except Gahini DH and Ruhango PH that had a moderate timeliness as seen 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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