



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 21 – 2023

(22 – 28 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 21

Event Based Surveillance (EBS) Highlights:

- During epidemiological week 21, no alert was notified through the electronic Community Event Based Surveillance System (eCBS).
- Alerts received through Epidemic Intelligence from Open Source (EIOS):
 1. DRC's North Kivu: Polio, measles vaccination campaign kicks off
 2. Cholera Outbreak Claims 17 Lives: South Africa on High Alert to Prevent Cross-Border Spread

Indicator Based Surveillance (IBS) Highlights:

- 383 immediate reportable diseases were notified by health facilities countrywide. They included cases of foodborne illness, acute flaccid paralysis (AFP), mumps, severe malaria; bloody diarrhea, measles/rubella, chicken pox, cholera, bacterial meningitis 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 21 revealed that, simple malaria cases increased and crossed the epidemic threshold. This is indicating that there is a possible outbreak of simple malaria. A deep investigation is needed to confirm and identify possible affected areas and recommendations aimed to reduce simple malaria cases in concerned areas.
- A total of 66 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 21, there was two outbreaks of foodborne illness in Rwanda, identified in Nyamagabe and Gatsibo districts.

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 1st June 2023, 135 deaths, 134 buried, 1 missing, 111 injured, 6 hospitalized, 105 discharged, 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 21, the overall completeness and timeliness of reporting in Rwanda was 98% and 96%, respectively.

WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 21

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 21, no alert received from community.

MEDIA SCAN

During the Epi week 21, alerts were received through Epidemic Intelligence from Open Source (EIOS):

1.DRC's North Kivu: Polio, measles vaccination campaign kicks off

Field health workers in the North Kivu province are set to vaccinate some 87 578 children aged between six and fifty-nine months. The weeklong campaign which started on May 20 will target pre-selected localities. If families are unable to reach those sites they should be visited by the vaccination teams. Polio is a highly infectious viral disease. Measles, also highly contagious, is serious disease caused by a virus. Both are particularly deadly among children under five. The vaccines for the two diseases prevent deaths. If the Immunization coverage in the Democratic Republic of Congo has progressed particularly thanks to the Mashako 2.0 plan, the UN Office for the Coordination of Humanitarian Affairs said this year saw a "particularly virulent" measles epidemic.

<https://www.africanews.com/2023/05/23/drcs-north-kivu-polio-measles-vaccination-campaign-kicks-off>

2. Cholera Outbreak Claims 17 Lives: South Africa on High Alert to Prevent Cross-Border Spread

South Africa's National Health Department is intensifying efforts to prevent the spread of cholera across its borders as the Southern African region grapples with an ongoing outbreak, which has already claimed the lives of at least 17 individuals. With heightened vigilance, the country aims to safeguard its population and mitigate the risk of imported cases as authorities monitor the situation closely.

<https://www.outlookindia.com/international/cholera-outbreak-claims-17-lives-south-africa-on-high-alert-to-prevent-cross-border-spread-photos-290054>

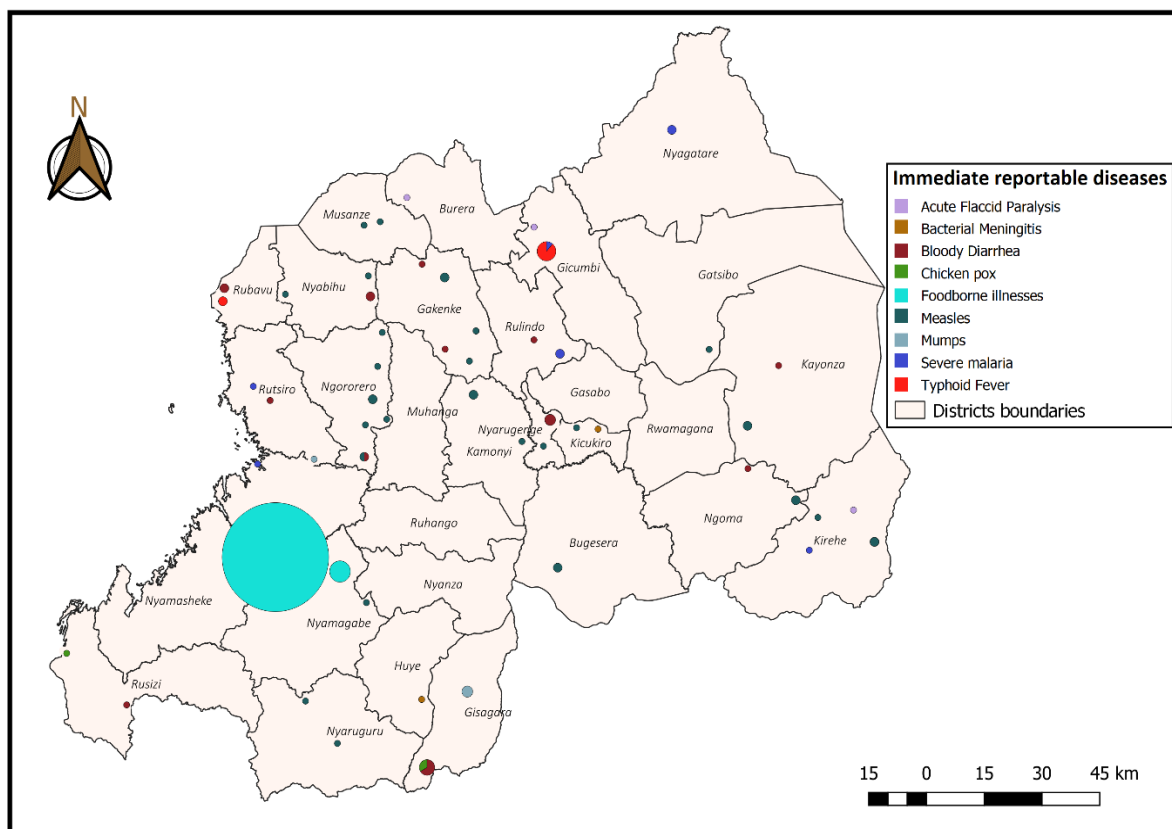
WEEKLY UPDATES ON INDICATOR BASED SURVEILLANCE (IBS) EPIDEMIOLOGICAL WEEK 21

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 21

During the Epi week 21, 383 suspected cases for immediate reportable diseases were notified: 298 cases of foodborne illness, 36 suspect cases of measles/rubella, 19 cases of bloody diarrhea, 4 cases of mumps, 8 confirmed cases of severe malaria, 2 suspected case of bacterial meningitis, 3 cases of acute flaccid paralysis, 10 suspect cases of Typhoid fever, 3 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. Meanwhile cases/suspected cases had been managed at the health facility level.

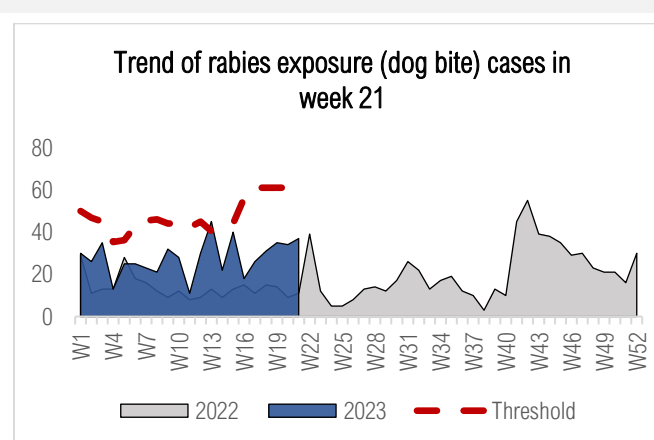
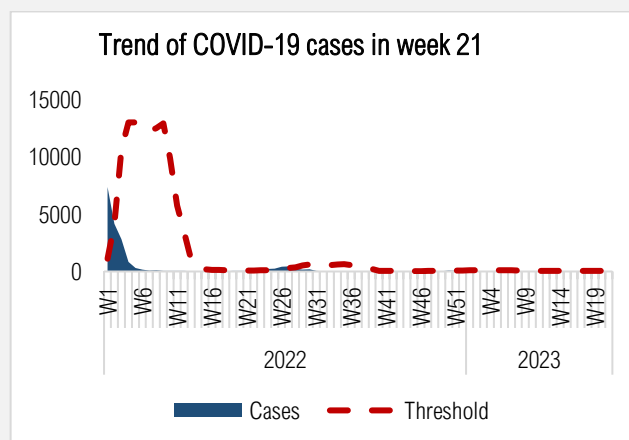
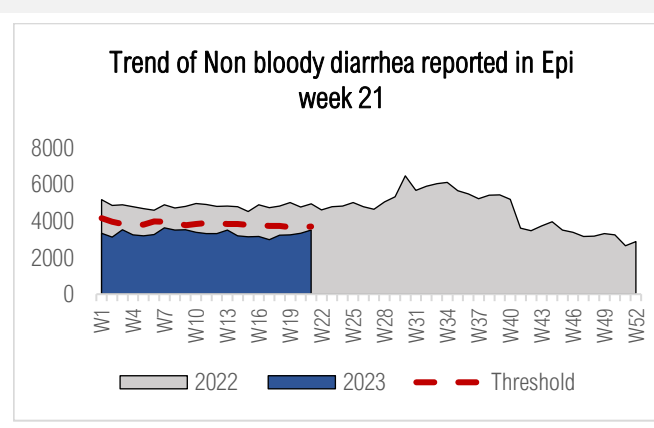
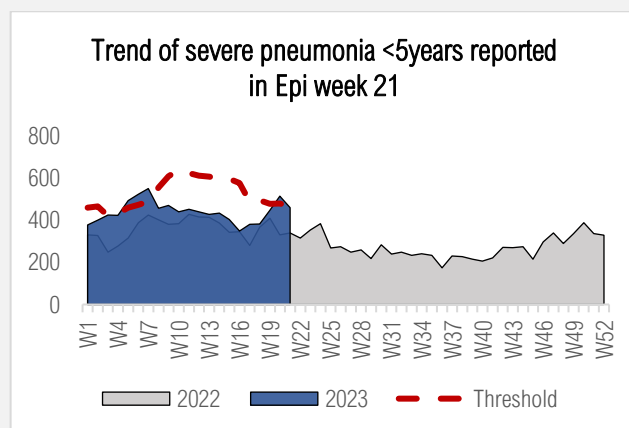
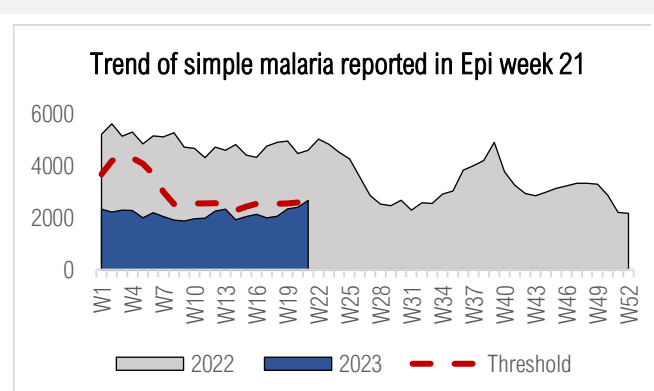
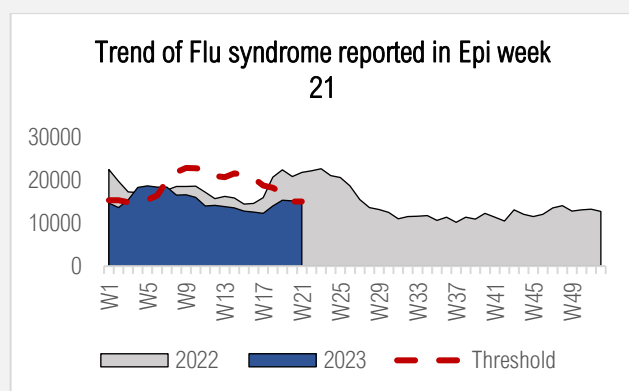


Distribution of immediate reportable diseases in Epi week 21

B. WEEKLY REPORTABLE DISEASES – EPI WEEK 21

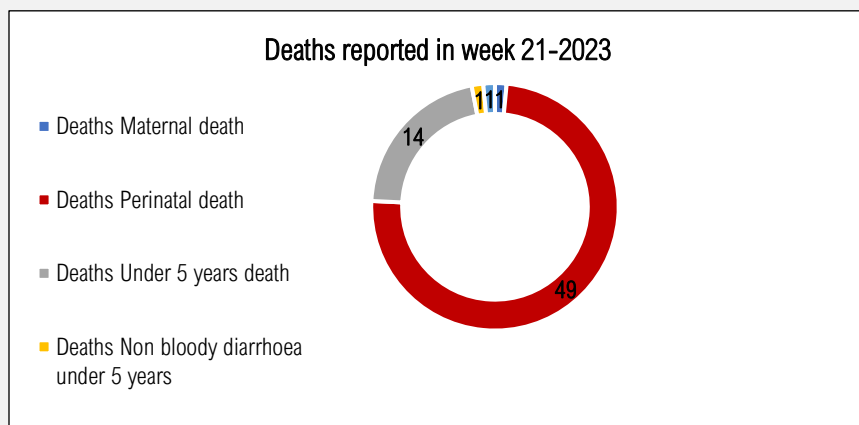
Description: In Rwanda, after the adaptation of the IDSR 3rd edition, eight diseases & events are being reported and analyzed on a weekly basis. These include flu syndrome, simple malaria, severe pneumonia for under 5 years, non-bloody diarrhea for under 5 years, COVID-19, dog bites, brucellosis, and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

In Epi Week 21, 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 crossed its respective epidemic threshold. This indicates that deep investigation is needed and take actions in order to reduce them.



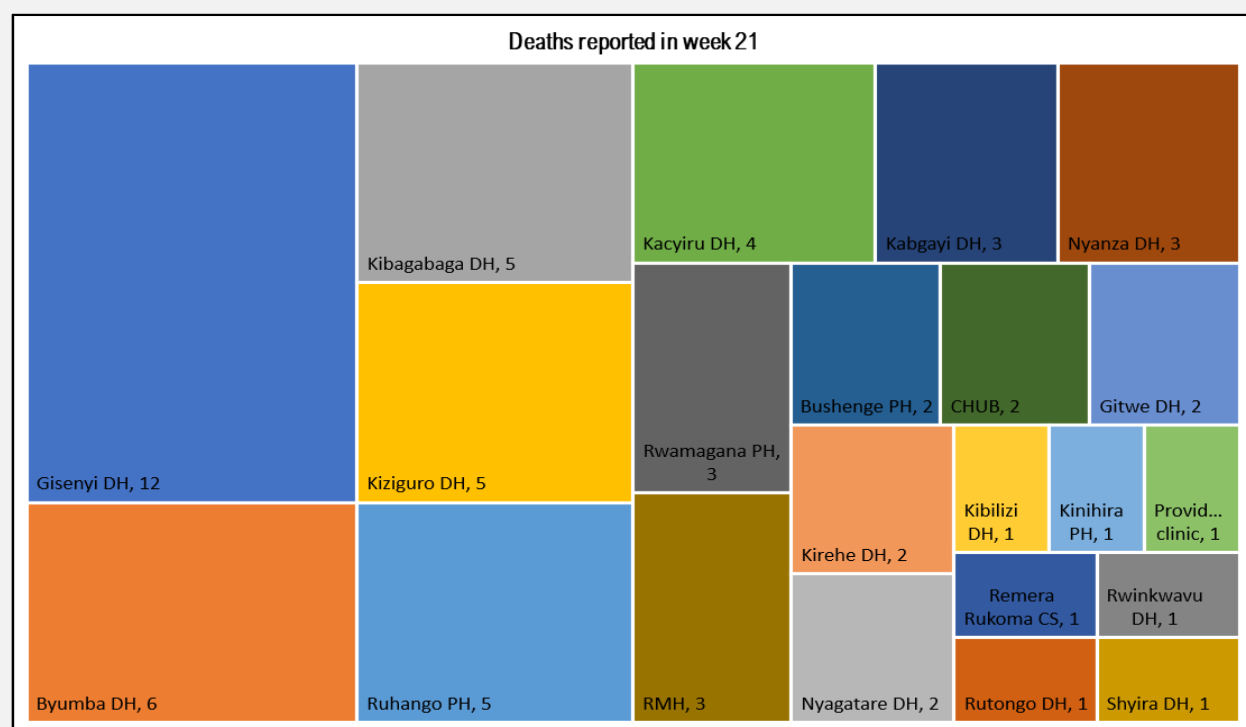
C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 21

In Epi week 21, as summarized in the chart below, a total number of 66 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 49 (74%) were classified as perinatal, 14 (21%) deaths of children under 5 years old, 1(2%) maternal death ,1 death (2%) due to non-bloody diarrhea and 1(2%) death due to severe malaria.



Cause of deaths declared in epi week 21

Deaths were reported from various catchment areas as follow: 12 deaths in Gisenyi DH, 6 deaths in Byumba DH, 5 deaths reported in each of the following hospitals: Kiziguro DH, Ruhango PH and Kibagabaga DH, 4 deaths in Kacyiru DH, 3 deaths reported in each of the following hospitals: Kabgayi DH, Nyanza DH, RMH and Rwamagana PH, 2 deaths reported in each of the following hospitals: Bushenge PH, CHUB, Gitwe DH, Kirehe DH and Nyagatare DH and 1 death reported in each of the following health facilities: Kibilizi DH, Kinihira PH, Rutongo DH, Rwinkwavu DH, Shyira DH, La providence clinic and Remera-Rukoma HC. (See figure below).



OUTBREAK AND EVENT UPDATES

EPIDEMIOLOGICAL WEEK 21

1. FOODBORNE ILLNESS OUTBREAK AT NYAMAGABE DISTRICT

Confirmed cases:	0	Date reported:	May 26, 2023	Risk assessment	Low
Suspect cases:	298	Source:	Kaduha DH		
Death(s):	0	District:	Nyamagabe		
Total cases:	298	Geoscope:	Low		

Description

On May 26th, 2023, Kaduha DH reported a high number of patients that were consulting Bwenda health post, Kibumbwe HC and Kaduha DH. A total of 298 patients were admitted at these health facilities presenting the following symptoms: vomiting, abdominal pain, and diarrhea. On May 27th, 2023, 1 death has also occurred in the community. This was an 18-year-old male from, Bwenda cell, Murambi village. This outbreak was found to be attributed to the consumption of meat of a died cow with unknown cause of death. Currently, 25 patients are still admitted in the health facilities. For 6 stool samples and 1 blood culture sample were collected and were sent to NRL for the laboratory analysis.

Recommendations and way forward:

- The dead body was taken by Nyamagabe RIB for more investigation at Forensic laboratory
- Stool samples were collected by Kaduha Hospital and sent at National Reference Laboratory
- District shall coordinate and supervise unsafe slaughtering at home.
- Health education on food safety has been conducted into the community.

2. FOODBORNE ILLNESS OUTBREAK IN GATSIBO DISTRICT

Confirmed cases	0	Date reported:	May 25, 2023	Risk assessment	Low
Suspected cases	24	Source:	NRL, eIDSR		
Death(s)	0	District:	Kiziguro DH and Gakenke HC		
Total cases	24	Geoscope:	Low		

Description

On May 25th, 2023, Kiziguro DH reported a high number of patients consulting Gakenke HC and Kiziguro DH from Gakoni Polytechnic. A total of 24 patients were admitted at health facilities complaining of fever, cough, abdominal pain, and headache. Currently, all patients have recovered.

Recommendations and way forward:

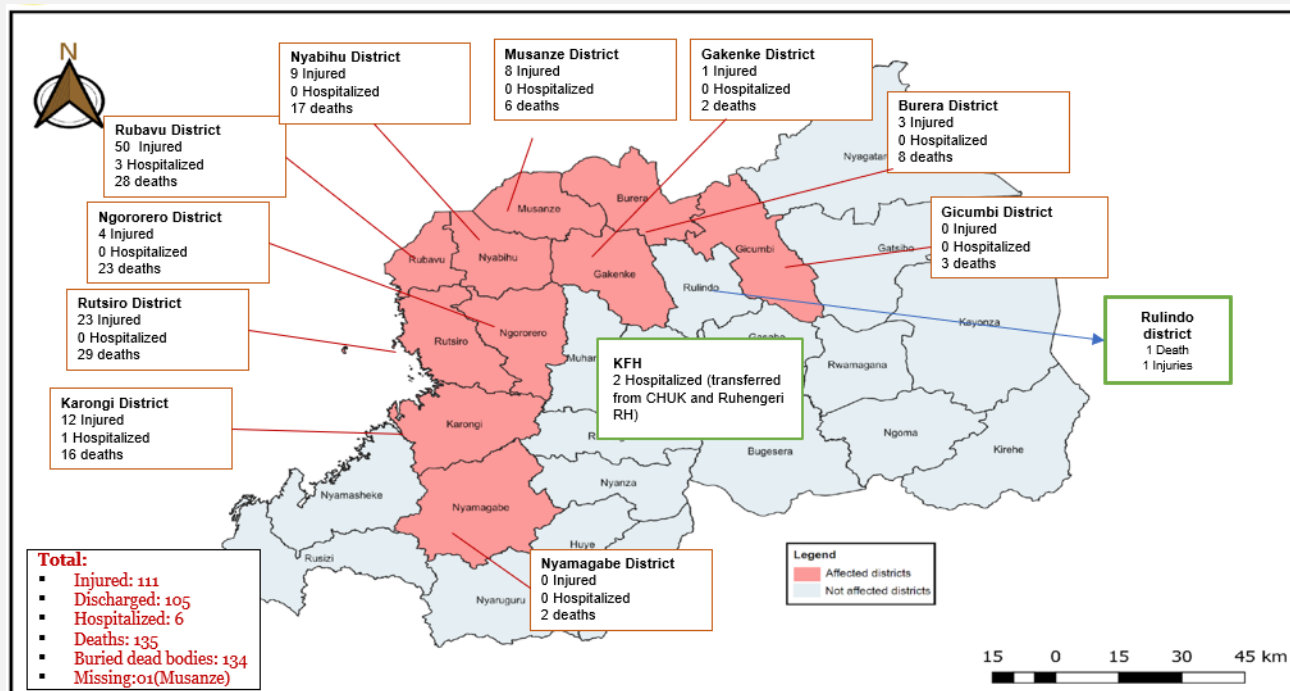
- Kiziguro DH visited the school kitchen, the washrooms and provided health education on hygiene and sanitation
- Recommendations were made to the school, to have first aid kit that will be useful in case of such foodborne illness outbreaks or any other health events.

3. OTHER EVENT UPDATES: FLOOD AND LANDSLIDES IN RWANDA

Injured	111	Date reported:	May,3 2023	Risk assessment	Moderate
Hospitalized	6	Source:	MINEMA		
Discharged	105	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 1st June 2023, 135 deaths, 134 buried, 1 missing, 111 injured, 6 hospitalized, 105 discharged, 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 1st June 2023

Rutsiro district has the highest number of deaths (29), seconded by Rubavu district (28 deaths), Ngororero 23 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 21

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 21, the overall completeness and timeliness of reporting in Rwanda were 98% and 96%, respectively. With regards to report completeness, all DH catchment areas had a score greater than 80%, that was to be appreciated and need to be maintained.

As for timeliness, the overall score was high: 96%, many hospitals catchment areas had the score greater than 80%, but three had moderate score: Nyagatare DH, Gakoma DH and Ruhango PH.

See on the figure below.

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.

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