



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 17 – 2023

(24 – 30 April 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 17

Event Based Surveillance (EBS) Highlights:

- During the epidemiological Epi week 17, no alert was received through the electronic Community Event Based Surveillance System (eCBS).

Indicator Based Surveillance (IBS) Highlights:

- 168 cases of alerts for immediate reportable diseases were received from health facilities countrywide, including cases of foodborne illness and suspect cases for measles/rubella, bloody diarrhea, acute flaccid paralysis (AFP), mumps, cholera, severe malaria and typhoid fever.
- 8 diseases and health conditions are being reported on a weekly basis, and a thorough analysis conducted for Epi Week 17 revealed that all weekly reportable diseases were below the threshold, indicating that there was no outbreak of these diseases during that Epi Week 17. The eight diseases are flu syndrome, simple malaria, severe pneumonia for under 5 years, non-bloody diarrhea for under 5 years, COVID-19, dog bites, brucellosis, and trypanosomiasis.
- 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 outbreak

In Epi Week 17, there were two reported outbreaks in Rwanda.

- The first was a foodborne illness outbreak occurred in the factory called pink mango C & D product located in Masoro Economic zone, Ndera sector, Gasabo District, Kigali.
- The second outbreak was a measles outbreak in Kirehe district, with a total of 3 new cases confirmed by epidemiological link making it 50 cumulative cases reported in Kirehe district.

Another event updates

The occurrence of floods and landslides caused by heavy rainfall occurred on 2nd May 2023 in Rwanda, affected 10 districts in Northern, Southern and Western of the country. As of 8th May 2023, 132 deaths 1 missing ,104 injured,19 hospitalized,87 discharged, 3 transferred 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 17, the overall completeness and timeliness of reporting in Rwanda were 94% and 71%, respectively.

WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) – EPIDEMIOLOGICAL WEEK 17

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 has taken the initiative to implement EBS through PHS&EPR Division.

During the week 17, no confirmed alert received from eCBS.

WEEKLY UPDATES ON INDICATOR BASED SURVEILLANCE (IBS) – EPIDEMIOLOGICAL WEEK 17

Rwanda has been implemented Indicator Based Surveillance through IDSR 3rd guideline where approximately 45 priority diseases, health conditions and public health events are being monitored, where health facilities are reporting on a regular basis either immediately or weekly. Diseases that are prone to outbreaks are being reported immediately while diseases that are considered as endemic are reported on a weekly basis.

A. IMMEDIATE REPORTABLE DISEASES – EPI WEEK 17

During Epi week 17, 168 alerts for immediate reportable diseases were notified:

96 cases of foodborne illness, 26 cases of bloody diarrhea, 24 suspect cases of measles/rubella, 11 cases of mumps, 4 suspect case of Typhoid fever, 4 confirmed cases of severe malaria and 1 suspected case of cholera.

Note: Diseases requiring laboratory confirmation, samples were taken and sent to National Reference Laboratory for testing and meanwhile suspected cases had been managed at the health facility level.

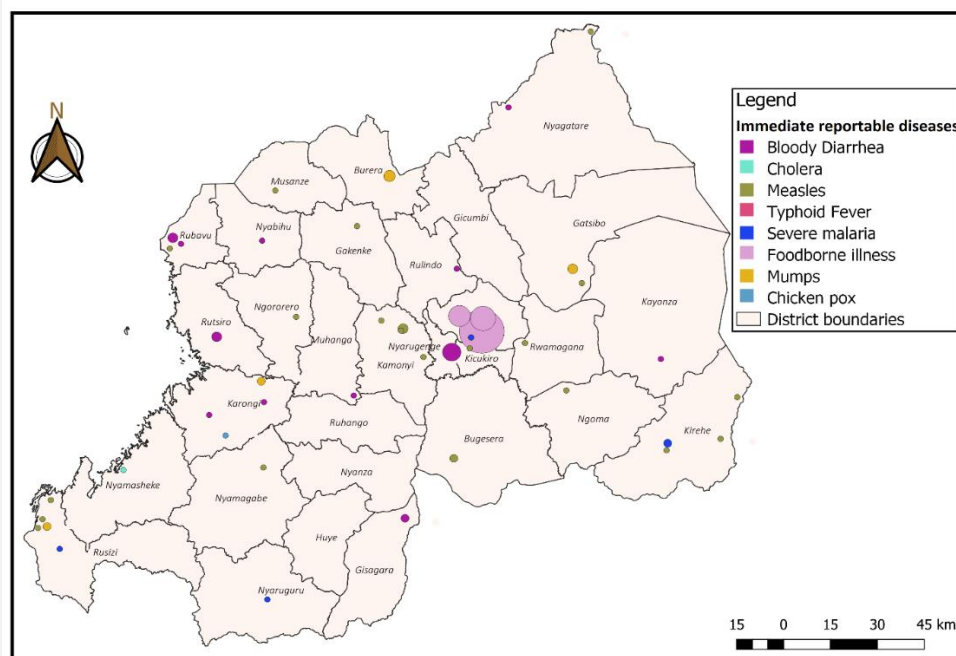
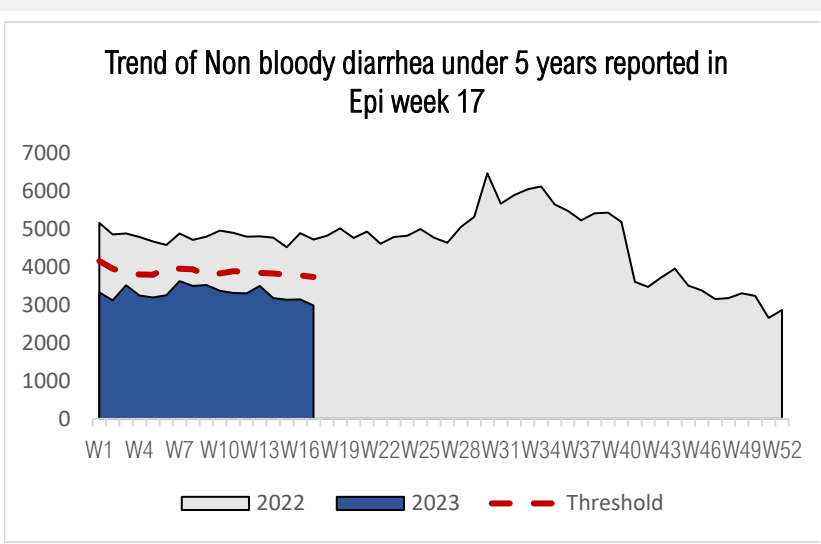
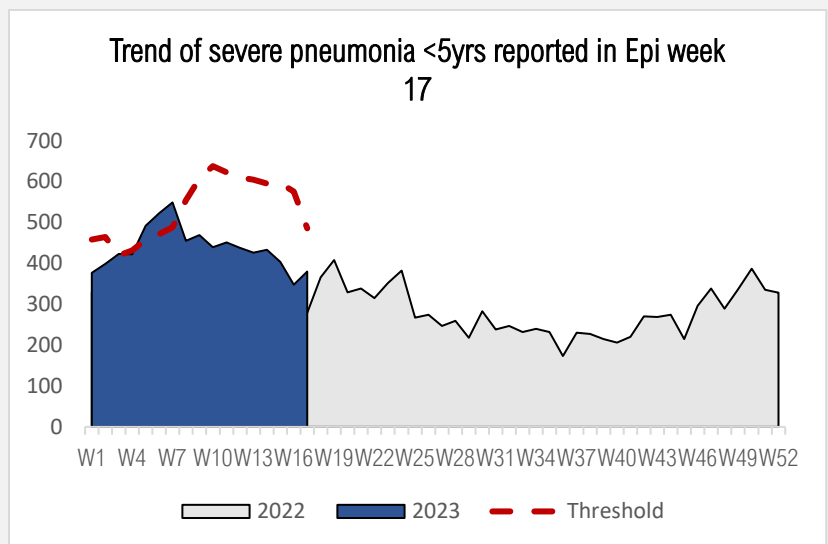
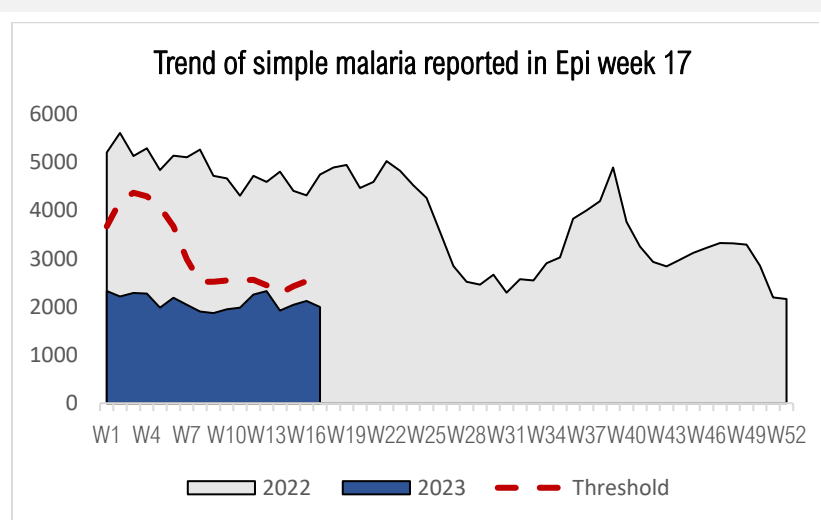
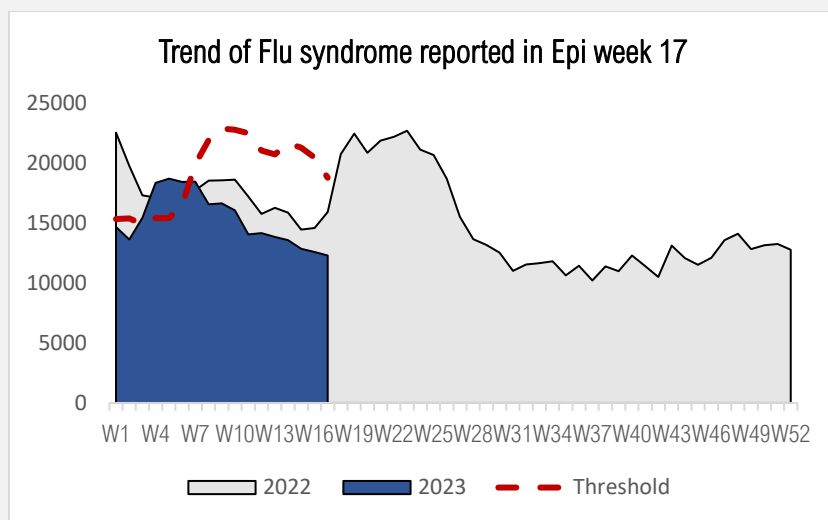
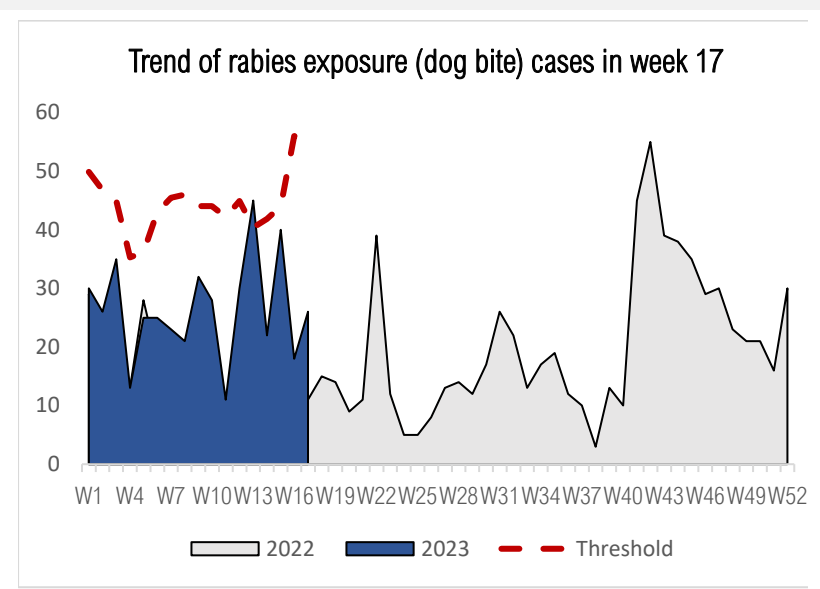
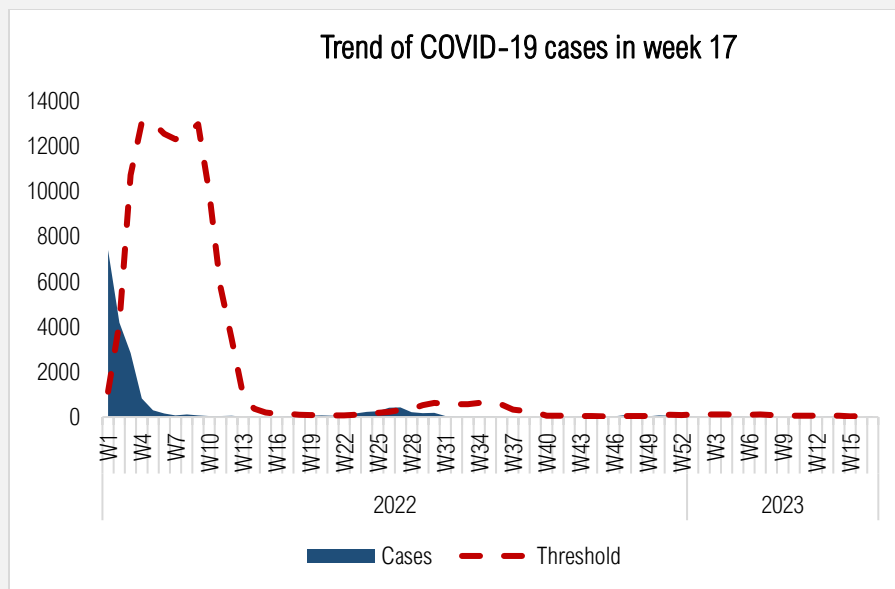


Figure: Distribution of immediate reportable diseases in Epi week 17

A. WEEKLY REPORTABLE DISEASES – EPI WEEK 17





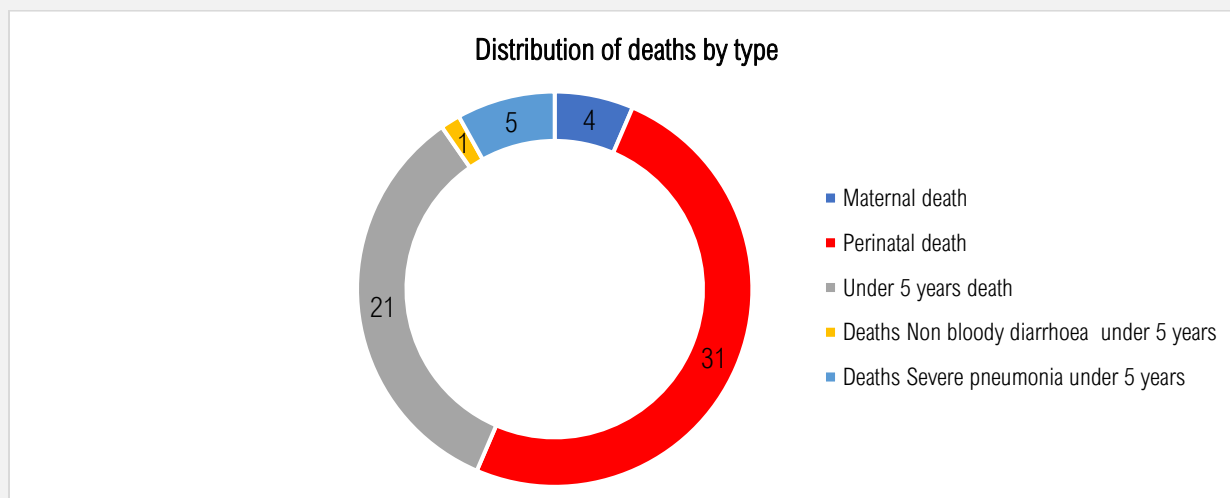
Description

Weekly reporting provides data for monitoring trends of diseases or conditions to early detect outbreaks. In Rwanda, after the adaptation of the 3rd edition of IDSR, eight diseases are being reported 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.

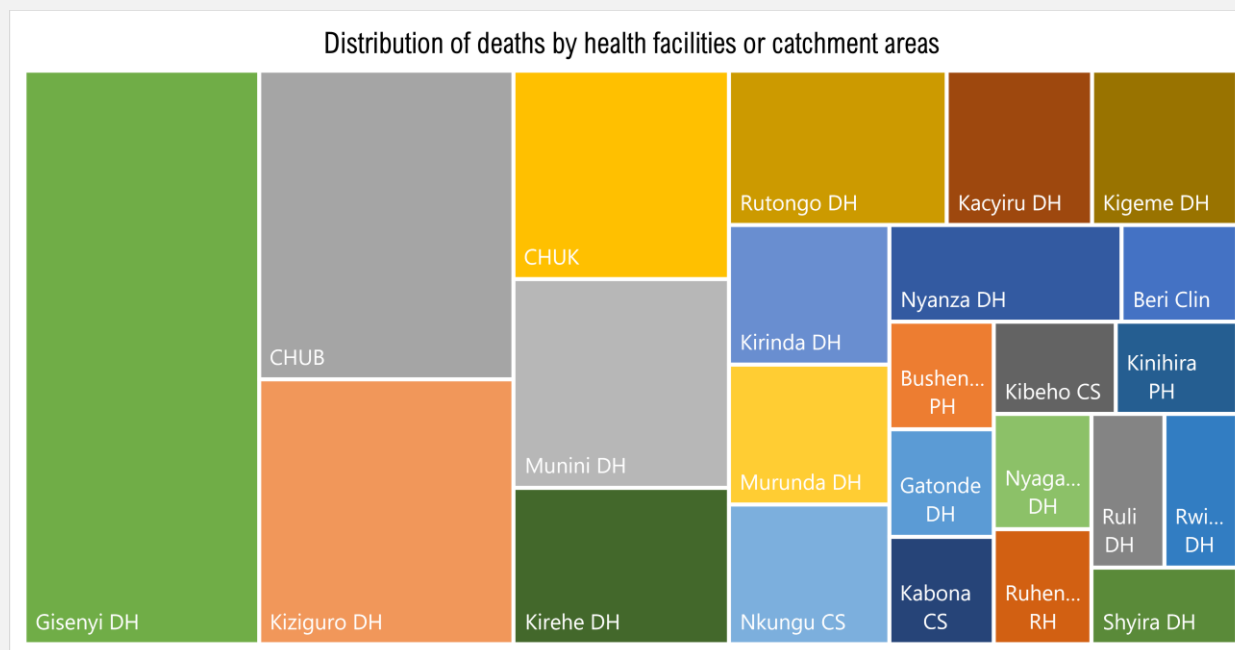
In Epi Week 17, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to the established threshold. The results of the analysis revealed that all weekly reportable diseases were below the threshold. This indicates that there were no outbreaks of these diseases during that week.

B. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 17

In Epi week 16, as summarized in the chart below, a total of 62 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 31 (50%) were classified as perinatal, 21 (34%) were deaths of children under 5 years old, 4 (6%) were maternal deaths, 5 (8%) was due to severe pneumonia in children under 5 years old, 1 (2%) was due to non-bloody diarrhoea under 5 years.



The deaths were reported from various catchment areas as follow: 12 deaths in Gisenyi DH, 7 deaths in CHUB, 7 deaths in Kiziguro DH, 4 deaths reported in CHUK and Munini DH, 3 deaths in Kirehe DH and Rutongo DH, 2 deaths in Kacyiru Police Hospital, Murunda DH, Kigeme DH, Kirinda DH, Nyanza DH and Nkungu HC; 1 death in Bushenge PH, Rwinkwavu DH, Ruli DH, Kinyihira PH, Gatonde DH, Nyagatare DH, Ruhengeri RH, Shyira DH, Kibeho HC, Kabona HC, Kibeho HC (See figure below)



OUTBREAK AND EVENT UPDATES - EPIDEMIOLOGICAL WEEK 17

1. FOODBORNE ILLNESS OUTBREAK

Confirmed cases:	96	Date reported:	April 27, 2023	Risk assessment	Low
Suspect cases:	0	Source:	Masaka DH (60), Kibagabaga DH (19), Kinyinya HC (14) Beri clinic (3),		
Death(s):	0	District:	Gasabo and Kicukiro		
Total cases:	96	Geoscope:	Low		

Event description

On 26/4/2023, in the factory named Pink Mango C & D Product located in Masoro Economic zone, Ndera sector, Gasabo District, Kigali, 4436man powers took the lunch (meat, rice, Maize floor/Kawunga, potatoes, beans with vegetables/dodo) at the factory and 383 among them presented abdominal distention, abdominal pain, diarrhea, some of them had vomiting and body weakness. The first 9 cases presented symptoms after consumption of the food on 26th April 2023. The affected people consulted at different health facilities including Kibagabaga DH, Masaka DH, Kinyinya HC, Rubungo HC, Remera HC and Beri Clinic. All patients have been treated and improved.

Interventions

- Case management at health facilities
- Outbreak investigation

2. MEASLES OUTBREAK

Confirmed cases	8	Date reported:	February 27, 2023	Risk assessment	Low
Epi link cases	43 (1 new)	Source:	NRL, eIDSR		
Death(s)	0	District:	Kirehe		
Total cases	51	Geoscope:	Low		

Event description

The measles outbreak is still ongoing in Kirehe district since on 27th February 2023. During the Epi Week 17; one additional case was identified in Mahama Refugee camp by epidemiological link making it a total of 8 laboratory confirmed cases and 43 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	104	Date reported:	May,3 2023	Risk assessment	Moderate
Hospitalized	19	Source:	Ministry of environment		
Discharged	87	Provinces	Western, Northern, Southern		
Death(s)	132	Geoscope:	Moderate		

Description

On third may 2023, 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 Northern, Southern and Western of the country. As of 8th May 2023, 132 deaths with 131 buried dead bodies, 1 missing, 104 injured, 19 hospitalized, 87 discharged, 3 transferred have been reported from the three provinces. In addition, a total of 5174 households have been destroyed by the floods.

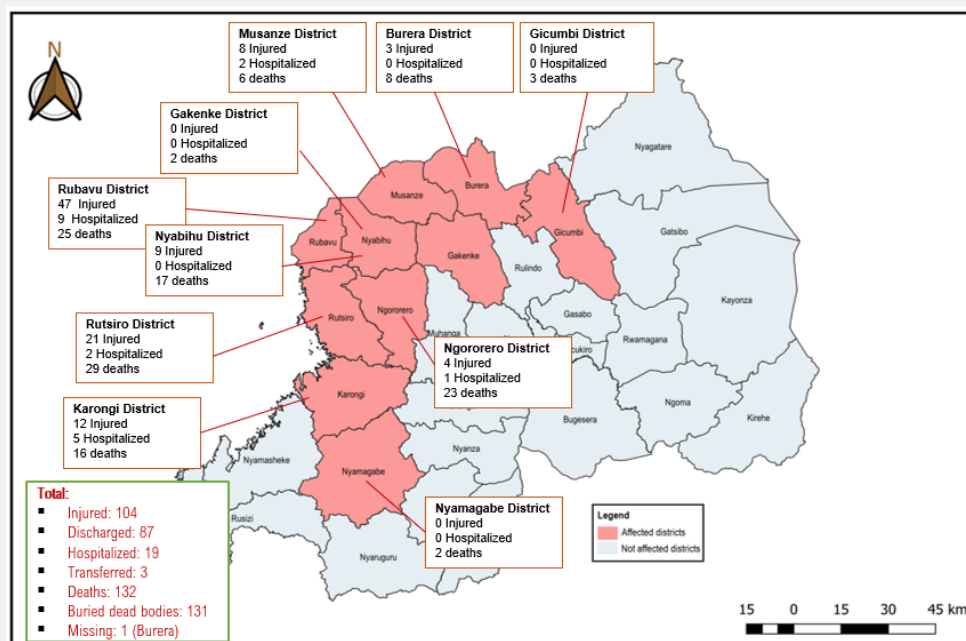


Figure: Distribution of injuries and deaths as on 8th May 2023

Rutsiro district has the highest number of deaths (29), secondly Rubavu district (25 deaths), Nyabihu and Karongi districts had respectively 17 and 16 deaths, while the 6 remain district had < 10 deaths. Regarding injuries, Rubavu district has the

highest number of injured persons: 47, secondly Rutsiro has the second number of injured: 21 persons while other affected districts have 12 and below.

Response

MINEMA activated a command center that coordinate the response. Some measures taken include evacuation and temporary relocation of residents from the high-risk areas, provision of food, other basic supplies to displaced persons and daily management of people in temporary sites.

eIDSR REPORTS COMPLETENESS & TIMELINESS - EPIDEMIOLOGICAL WEEK 17

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 17, the overall completeness and timeliness of reporting in Rwanda were 94% and 71%, respectively. With regards to report completeness, Gitwe DH had a moderate score (78%), Ruhango PH had a low score of 50%, while RMH did not report.

As for timeliness, the overall score was moderate: 71%, due to the holidays of Monday, many district hospitals catchment areas scored a moderate and low timeliness as seen on the figure below.

Note: 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.

Completeness

Timeliness

Hospital catchment area	W01	W02	W03	W04	W05	W06	W07	W08	W09	W10	W11	W12	W13	W14	W15	W16	W17	W01	W02	W03	W04	W05	W06	W07	W08	W09	W10	W11	W12	W13	W14	W15	W16	W17	
Nyagatare	100	100	100	100	100	86	93	93	100	93	100	100	86	93	100	100	100	100	100	100	100	100	86	93	93	93	93	100	100	86	79	86	94	79	
Gatunda	100	100	100	100	100	100	100	100	100	78	100	100	89	100	100	100	100	100	100	100	100	100	100	100	100	78	89	100	89	100	100	100	78		
Ngarama	88	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	88	100	100	100	100	100	100	100	100	100	100	100	100	100	100	75		
Kiziguro	100	100	100	100	100	100	100	100	100	100	100	100	100	92	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	92	100	100	100		
Gahini	100	100	100	100	100	100	89	89	78	100	100	78	100	100	100	100	100	100	100	100	100	100	89	89	89	78	100	100	78	100	100	100	100	100	
Rwinkwavu	100	100	100	100	100	100	100	100	100	100	100	88	100	88	88	88	100	100	100	88	100	100	100	100	100	100	88	88	88	100	63	75	100	88	
Kibungo	94	100	94	100	100	100	100	100	100	100	100	100	100	94	100	100	100	94	100	94	100	100	100	100	100	100	100	100	100	94	100	100	100		
Kirehe	100	100	100	100	100	100	100	100	100	90	100	100	100	100	100	100	100	100	100	100	100	95	95	100	100	100	90	95	100	100	90	100	100	85	
Rwamagana	76	71	88	100	100	94	100	100	94	100	88	94	100	100	100	100	100	76	65	53	82	76	88	100	100	94	100	100	94	94	94	100	88	71	
Nyamata	100	94	100	94	100	100	100	100	100	100	100	100	100	100	100	100	88	100	88	76	94	88	94	94	100	88	100	88	100	94	76	100	100	76	
Kinihira	100	100	100	100	100	100	89	89	100	89	89	100	89	89	89	89	100	100	100	100	89	100	89	67	100	89	78	89	100	89	89	89	89	89	
Rutongo	93	87	93	87	100	100	100	100	100	93	93	100	100	100	100	100	100	93	87	93	73	100	100	100	100	100	93	93	100	93	100	100	100	100	
Gatonde	100	86	100	100	100	100	100	100	100	86	100	100	100	100	100	100	100	100	86	100	100	100	100	100	100	100	86	100	100	86	100	100	100	71	
Butaro	80	85	95	95	75	90	95	95	95	100	95	100	95	100	100	95	100	80	85	80	75	65	90	85	95	90	95	90	90	85	75	85	95	75	
Ruli	100	100	100	100	100	100	100	100	100	100	90	90	100	100	100	100	100	100	100	100	100	100	90	100	100	100	90	90	100	100	90	100	100	100	
Nemba	100	100	100	100	100	89	100	100	100	89	100	100	100	89	100	100	100	100	100	89	100	100	89	100	100	100	89	78	100	100	78	100	100	67	
Ruhengeri	94	94	94	100	83	89	89	89	100	94	94	83	94	89	94	89	94	94	89	89	100	83	89	83	72	94	94	94	78	94	83	89	89	89	
Byumba	96	100	100	96	96	96	100	100	100	96	100	96	96	92	100	100	100	96	100	96	96	96	100	100	100	100	96	96	96	96	81	96	96	96	
CHUB	0	100	100	100	100	100	100	100	0	0	100	100	100	0	100	100	100	0	100	100	100	100	100	0	0	0	0	100	100	0	100	100	0	0	
Kabutare	84	95	100	100	95	95	95	95	89	95	95	100	89	89	100	100	89	84	89	89	84	89	89	89	84	95	74	100	100	79	100	100	53		
Kabgayi	100	100	92	85	100	92	92	92	92	100	100	92	92	85	100	100	92	100	92	85	92	77	92	85	85	100	92	92	92	69	92	92	69		
Kibilizi	100	100	100	100	100	100	100	100	100	100	100	82	91	100	100	100	100	100	100	100	100	82	100	100	100	100	82	91	82	91	91	91	91		
Gakoma	83	100	100	100	83	100	100	100	83	100	100	100	67	100	100	100	83	83	100	100	100	67	83	100	100	100	100	67	50	83	67	50	50		
Gitwe	100	100	89	100	100	78	100	100	100	100	100	100	100	89	100	100	78	100	100	89	89	78	100	78	100	100	89	89	100	67	100	78	44		
Ruhango	88	100	100	100	88	88	75	88	88	100	100	63	75	63	63	75	50	88	88	88	100	88	88	75	88	88	88	100	63	75	50	63	50	38	
Remera Rukoma	100	100	100	93	100	100	100	100	100	100	100	100	93	100	100	100	100	100	100	93	100	100	100	100	100	100	93	100	93	93	93	100	93		
Nyanza	84	84	89	79	95	100	89	89	74	95	100	79	79	89	100	100	95	84	84	89	79	74	100	89	84	63	89	84	74	68	47	89	95	47	
Kigeme	77	77	100	92	100	92	100	100	100	100	92	100	92	85	100	100	100	77	69	92	92	100	92	100	92	100	92	100	92	100	92	46	100	85	46
Kaduha	100	90	100	100	100	100	100	100	100	100	100	100	90	100	100	100	90	100	90	90	100	100	100	100	100	90	100	90	90	80	90	100	60		
Munini	100	94	100	100	100	94	100	100	100	100	100	100	100	100	100	100	94	100	94	100	100	94	94	100	100	100	94	88	94	100	82	100	100	88	
Bushenge	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	63	
Kibogora	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	93	100	100	100	100	100	100	100	100	100	100	100	100	100	100	93	93	86	
Kibuye	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Kirinda	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	83	100	100	100	
Mugonero	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	86	100	100	100	100	100	100	100	100	100	100	86	100	100	86	100	100	86	
Shyira	100	100	100	100	100	88	100	100	100	100	100	100	94	94	100	100	94	100	100	100	100	88	100	100	100	100	100	100	94	88	94	100	79		
Muhororo	100	100	100	100	100	100	100	100	100	100	100	100	100	90	100	100	100	100	100	90	100	100	100	100	90	100	100	100	100	80	70	100	30		
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Gihundwe	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	90	100	80	100	90	90	90	100	100	100	100	90	90	100	70	
Mibilizi	100	100	100	100	100	100	100	100	100	100	100	100	92	100	100	100	100	100	100	100	100	100	100	100	100	100	83	100	100	92	100	100	100	100	
Gisenyi	100	100	100	100	100	100	100	100	100	94	100	100	100	100	100	100	94	100	100	94	100	100	100	100	100	100	94	94	100	100	100	88	100	88	
Murunda	89	100	100	100	100	95	100	100	100	100	100	100	95	95	100	100	95	89	100	95	100	100	95	100	95	100	95	95	100	84	95	100	89	95	
CHUK	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Nyarugenge	100	100	89	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	89	100	100	100	100	100	100	100	100	100	100	78	
Muhima	100	100	100	100	100																														