



# WEEKLY EPIDEMIOLOGICAL BULLETIN

## WEEK 41 – 2023

(09 -15 October 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 41

#### Event Based Surveillance (EBS) Highlights:

- During the epidemiological week 41, six signals were notified through the electronic Community Event Based Surveillance System (eCEBS): there were 2 alerts, 1 of human illness 1 of animal illness or death and 4 human deaths.
- Two alerts were identified through the Epidemic Intelligence from Open Source (EIOS):
  - South Kivu: A confirmed case of monkeypox recorded in Bukavu (DPS)
  - Monkey pox: South Kivu reaches the milestone of 6 cases, more than 90 people under surveillance.

#### Indicator Based Surveillance (IBS) Highlights:

- 227 immediate reportable diseases were notified by health facilities countrywide. They included the cases of acute flaccid paralysis (AFP), foodborne illness, mumps, severe malaria; bloody diarrhea, measles/rubella, cholera, bacterial meningitis, chicken pox and unknown disease.
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for Epi Week 41 revealed that the cases of flu syndrome surpassed the epidemic threshold.
- A total of 65 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. The majority of deaths were classified as perinatal deaths and deaths of children under 5 years.

#### Outbreaks updates in week 41

Outbreaks occurred:

Two outbreaks of occurred respectively in 2 districts:

- Foodborne illness in Nyarugenge district, Nyamirambo sector-Saint Andre School
- Bloody diarrhea outbreak in Karongi district, Rwankuba Sector, Nyarusanga Cell- Kiziba refugee camp

#### Completeness and timeliness

In Epi Week 41, the overall completeness and timeliness of surveillance data reporting in Rwanda was 99% and 97% respectively.

## WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 41

**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 BASED SURVEILLANCE

During the Epi week 41, six events were notified from community, including:

- **2 alerts:**
  - 1 of human illness occurred on 3/10/2023 in Ngororero District, Muhororo sector, Mubuga Cell, Gasove Village, where three unrelated families, consisting of five individuals from have been reported by the Gasove Community Health Workers for displaying symptoms of altered mental status. These symptoms were developed following a visit to a traditional healer, where they consumed a concoction of warm water mixed with unknown traditional herbs. They consulted Nyamita health post (located in Ntaganzwa HC), and referred to Muhororo DH for further medical care. Currently, they were treated and are recovered.
  - 1 of animal illness or death occurred on 15/10/2023, in Nyagatare district, Karama sector, Bushara cell, Bushara village, where 3 chickens and 10 chicks died the same day. They were suspected of having infectious bursal disease (Muraramo). No other deaths have occurred.
- **4 human deaths:**

reported respectively by 4 villages: Mwiyanike, Rukeri, Ruherahere located in Ngororero district and Kariba located in Gicumbi district.

### MEDIA SCAN

#### - South Kivu: A confirmed case of monkeypox recorded in Bukavu (DPS):

The provincial health division announced this on Wednesday October 11, 2023, following laboratory examinations. Doctor Claude Bahizire, communications officer at the provincial health division (DPS), specifies that 3 other suspected cases have been identified, including one in the Walungu territory and two others in Kamituga in the Mwenga territory. He informs that 15 contact cases are already in quarantine.

"There is a danger because it is a very contagious and viral disease. Suspected cases and contacts are under surveillance in quarantine. The sick person starts with fever, reddish spots or spots with fluid on the skin. The population must be careful," he said in an address to the press.

He explains that measures have been taken by the provincial health division to deal with this situation.

It should be noted that monkey pox or Monkeypox is transmitted from a sick animal to a man and from sick man to healthy man. It manifests itself as pimples filled with fluid all over the body, including the scalp. Treatment is symptomatic. To date, there is no vaccine against this disease. <https://7sur7.cd/2023/10/12/sud-kivu-un-cas-confirme-de-la-variole-de-singe-enregistre-bukavu-dps>

- Monkey pox: South Kivu reaches the milestone of 6 cases, more than 90 people under surveillance.

5 new cases of monkeypox or Monkeypox have been confirmed in the province of South Kivu. In addition to the first case confirmed in Bukavu last week, these new cases confirmed in Mwenga territory bring the bar back to 6 cases.

The Provincial Health Division (DPS) in South Kivu, confirmed this in an address to the local press, on Saturday October 14, 2023. Its communications manager, Doctor Claude Bahizire reports that 94 people listed as contacts of the cases confirmed are under surveillance. He calls on the population to respect barrier measures to protect themselves against this contagious disease. *"These cases are all monitored. Monkeypox is a very contagious disease. If it is neglected, it can lead to mortality. If the population manages to follow the advice of health professionals, they can survive."* did he declare. It should be noted that monkey pox or Monkeypox is transmitted from a sick animal to a man and from sick man to healthy man. It appears as fluid-filled pimples all over the body, including the scalp. Its treatment is symptomatic. <https://7sur7.cd/2023/10/16/variole-de-singe-le-sud-kivu-atteint-la-barre-de-6-cas-plus-de-90-personnes-sous-surveillance> KLY UPDATES ON INDICATOR BASED SURVEILLANCE (IBS),

## OUTBREAK AND EVENT UPDATES EPIDEMIOLOGICAL WEEK 41

**Description:** *Rwanda had 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 41

During Epi week 41; 227 cases of immediate reportable diseases were notified.

- 41 cases of chicken pox were reported by 16 HFs. None crossed the threshold.
- 26 cases of mumps were reported by 13 HCs. None crossed the threshold.
- 22 cases of foodborne illness reported by 2 HFs, including Mayange HC, and Byumba DH. All these health facilities crossed the threshold, and those cases were occurred in previous weeks.
- 71 suspected cases of bloody diarrhea reported by 28 HCs. In the previous week, 3 samples from Kiziba refugee Camp tested positive on Shigella. Additionally, 8 cases from Mata HC are from Muhanga transit center, after a total of 31 detainees presented with abdominal pain, headache, and diarrhea.
- 29 suspected cases of Measles/Rubella reported by 20 HCs, none crossed the threshold.
- 21 confirmed cases of severe malaria reported by 14 health facilities, and they crossed the alert threshold. Those HFs included Busasamana HC, Gatunda DH, Kibilizi DH, Kibuye RH, Kigeme DH, Kirehe DH, Masaka DH, Mugombwa RC, Munini DH, Nemba DH, Nyagatare DH, Ruli DH, Rugarama HC and Rukura HC.
- 8 suspected cases of acute flaccid paralysis reported by 8 health facilities that crossed alert threshold: Birembo HC, Byumba HC, Gakoma DH, Gitarama HC, Kabere HC, Kibogora HC, Kirinda DH and Muhororo HC.

- 2 suspected case of cholera was reported by Nkanka HC and Kivumu(Rutsiro HC)
- 2 suspected bacterial meningitis was reported by CHUB
- 5 cases of unknown diseases were reported by Ntaganzwa HC.

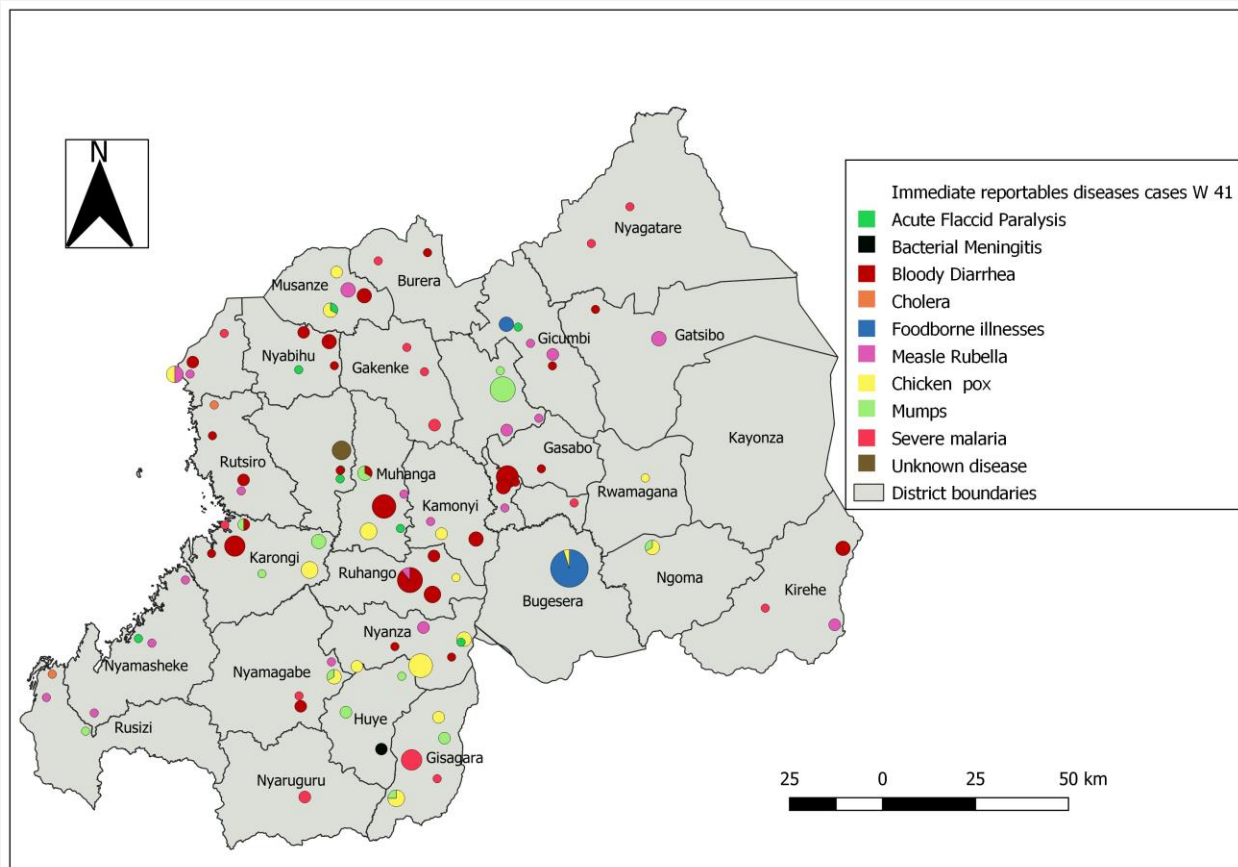
#### Notes:

For the diseases whose cases crossed the thresholds, District Hospitals are recommended to investigate.

For diseases requiring laboratory confirmation, the samples were collected and sent to the National Reference Laboratory for testing.

All confirmed cases and suspected cases had been managed at health facility level.

(See the distribution of cases by place in the map below).



*Distribution of immediate reportable diseases in Epi week 41*

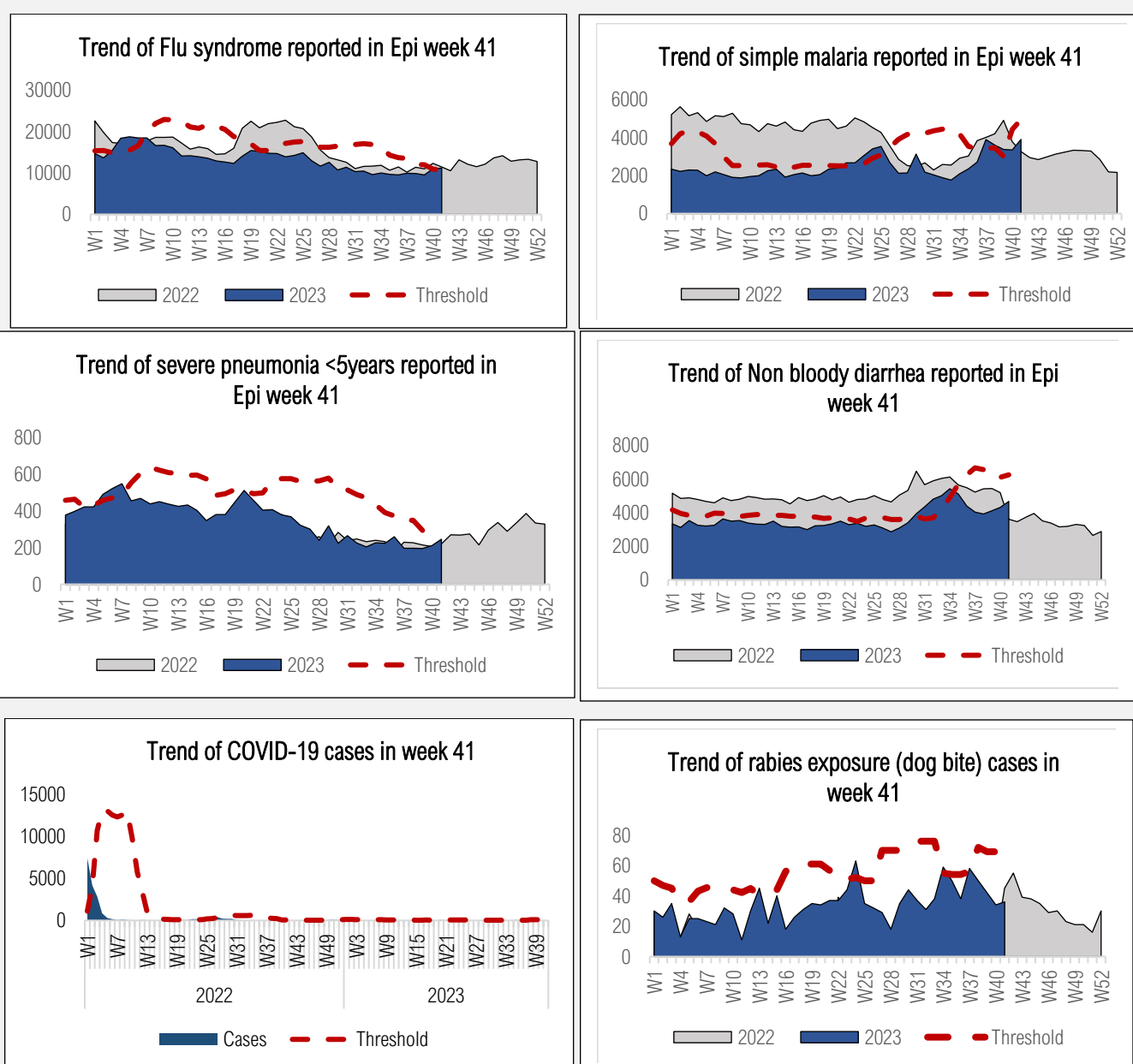
## WEEKLY REPORTABLE DISEASES – EPI WEEK 41

**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 41, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to their respective epidemic thresholds. The results of the analysis revealed that flu syndrome disease surpassed the epidemic threshold, especially in the following DH catchment areas: Gakoma, Muhima, Nyarugenge, Rutongo, Rwinkwavu and Shyira DHs.

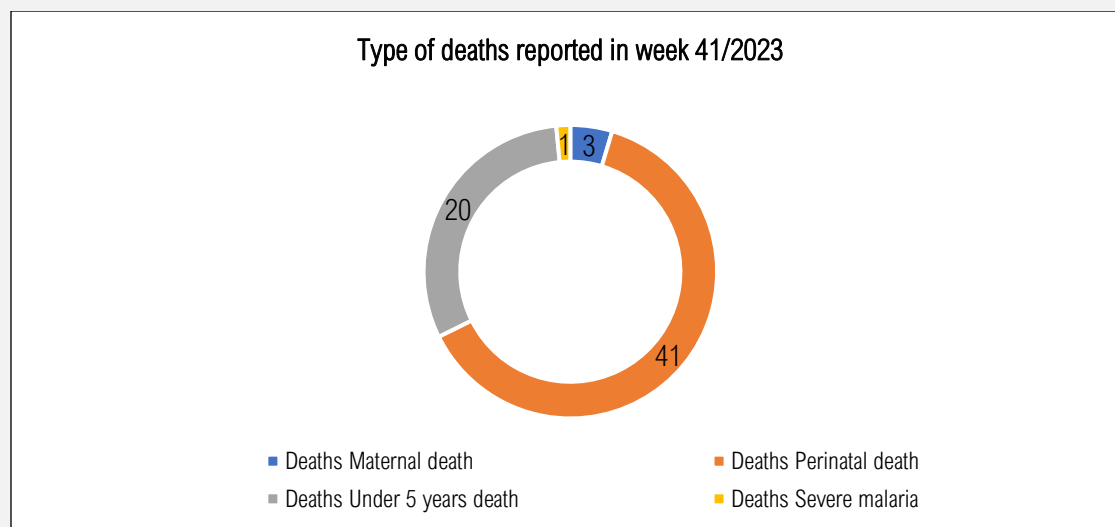
The DHs that surpassed the threshold are recommended to conduct an investigation.

(The weekly reportable diseases trends in the figures below)



## B. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 41

In Epi week 41, as summarized in the Pie Chart below, a total number of 65 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 41 (63%) were classified as perinatal, 20 (31%) were deaths of children under 5 years old (1 death was due to non-bloody diarrhea), 3 (5%) maternal deaths and 192%) death due to severe malaria.

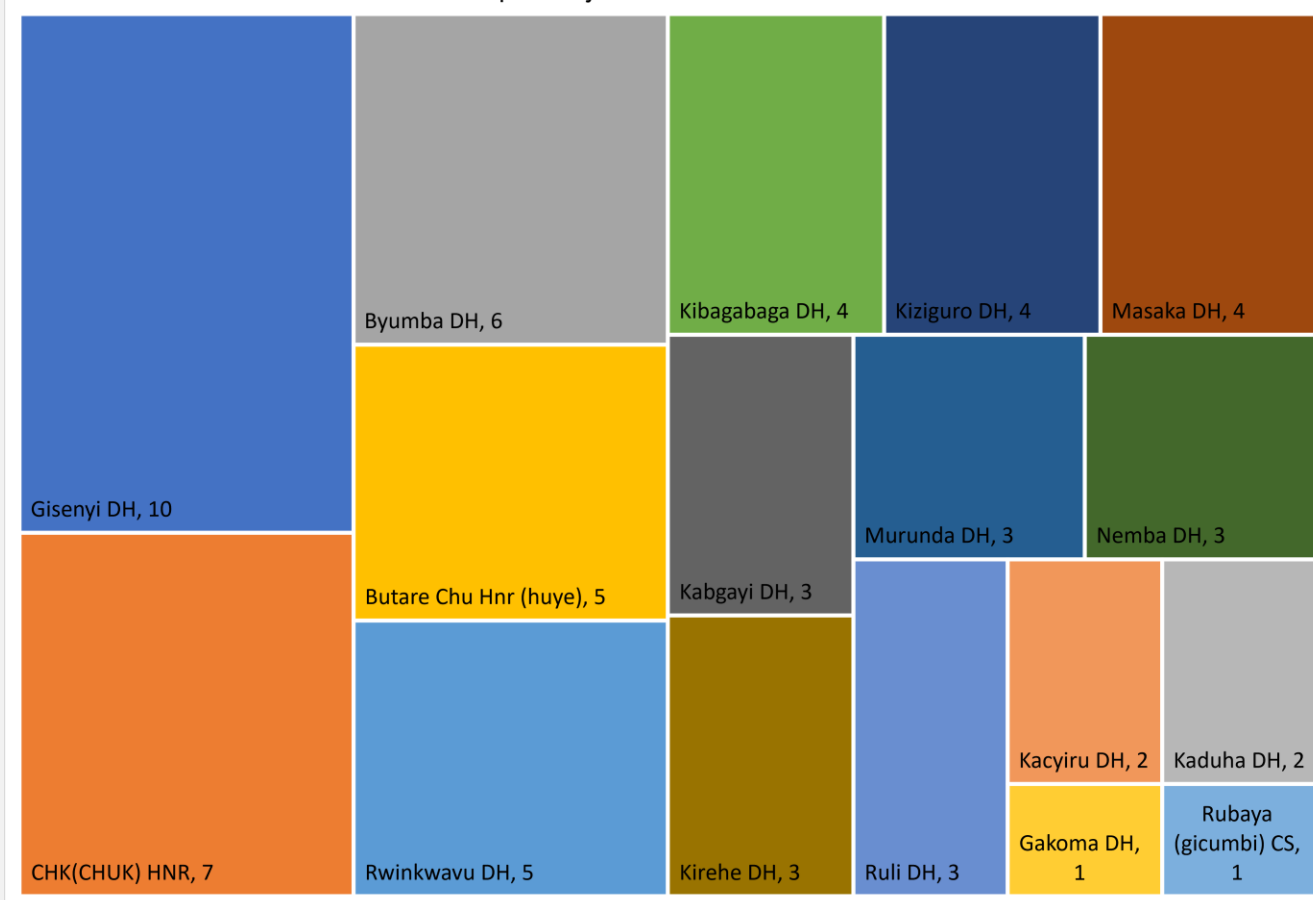


*Cause of deaths declared in epi week 41*

Deaths were reported from various catchment areas as follow:

- 10 deaths were reported by CHUK
- 8 deaths were reported by CHUB
- 7 deaths were reported by Rwinkwavu DH
- 6 deaths were reported respectively by Gisenyi DH, Kacyiru DH and Kirehe DH
- 5 deaths were reported by Rwanda Military Hospital
- 4 deaths were reported respectively by Byumba DH, Kabaya DH and Masaka DH
- 3 deaths were reported respectively by Kigeme DH and Kiziguro DH
- 2 deaths were reported respectively by Kaduha DH, Mibilizi DH, Murunda DH, Nyanza DH, Rutongo DH and Ruhengeri RH
- 1 death was reported respectively by Butaro DH, Kabgayi DH, Kibagabaga DH, Kibilizi DH, Ruli DH, Munini DH, Kibilizi (Nyanza) HC, Muremure HC and Ndego HC

Deaths reported by health facilities in week 41/2023



## OUTBREAK AND EVENT UPDATES EPIDEMIOLOGICAL WEEK 41

### EAK AND EVENT UPDATES EPIDEMIOLOGICAL WEEK 4

#### 1. FOODBORNE ILLNESS OCCURRED IN NYARUGENGE DISTRICT, NYAMIRAMBO SECTOR-SAINT ANDRE SCHOOL

Confirmed cases	0	Date reported:	October 11, 2023	Risk assessment	Low
Suspected cases	26	Source:	eIDSR		
Death(s)	0	District	Nyarugenge		
Total cases	26	Geoscope:	Low		

#### Outbreak description:

On 11/10/2023, students from St Andre started presenting similar symptoms of abdominal pain, bloody and non-bloody diarrhea, and vomiting. A total of 26 students were recorded. A team from Nyarugenge RRT investigated this event and reported that it was due to poor hygiene. This challenge was addressed and solved by the school. All students were treated, have recovered and no other case was recorded.



## 2. BLOODY DIARRHEA OUTBREAK IN KARONGI DISTRICT, RWANKUBA SECTOR, NYARUSANGA CELL-KIZIBA REFUGEE CAMP

Confirmed cases	02	Date reported:	September 3, 2023	Risk assessment	Low
Suspected cases	08	Source:	eIDSR		
Death(s)	0	District/HFs:	Kiziba camp/ Kibuye RH		
Total cases	10	Geoscope:	Low		

### Outbreak description:

Since 03/09/2023, there has been a surge in suspected *Shigella* infections at Kiziba camp. A total of 10 cases have been registered so far, comprising 4 cases in September and 6 cases in October 2023. Among them, 4 tested positive; 2 were isolated for confirmed for *shigella dysenteriae*. 8 cases were admitted, and 2 cases were managed as OPD cases.

Field investigation was conducted by Kibuye RH RRT and revealed the possible causes to be:




- Use of water from a stream from the mountain which is untreated.
- Use public toilets shared by many people.

### Recommendations made by Kibuye RH after field investigation are the following:

- The organizations responsible for sanitation in the refugee camp should devise methods to ensure that the residents have access to clean drinking water. This could involve supplying them with water treatment chemicals as one potential solution.
- Handwashing facilities should be set up in various locations within the camp.
- Community health workers should dedicate greater effort and place a stronger emphasis on providing health education within the community to enhance awareness.
- Close down the insufficient latrines and instruct the population to utilize public facilities with enhanced cleaning protocols.
- Conduct testing on the water from the natural stream preferred by the community to determine its safety for consumption.
- When handling identified cases, it is crucial to follow established protocols, which include isolation, containment, and if necessary, making referrals.

## eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 41

*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 the Epi Week 41, the overall completeness and timeliness of disease surveillance data reporting in Rwanda was 99% and 97%, respectively. With regards to completeness of surveillance reports, all hospitals had the high completeness (>80%). For the timeliness, the overall score was 97%, almost all hospitals had the high timeliness (>80%), except Nyamata DH and Muhima DH that had a moderate timeliness score (between 60% and 79%).

Details on completeness and timeliness for all health facilities are showed in the figures below.

- 10 -

Hospital catchment area	Timeliness																																										
	W01	W02	W03	W04	W05	W06	W07	W08	W09	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21	W22	W23	W24	W25	W26	W27	W28	W29	W30	W31	W32	W33	W34	W35	W36	W37	W38	W39	W40	W41		
Nyagatare	100	100	100	100	100	86	93	93	93	93	100	100	86	79	86	94	79	94	94	86	79	93	86	93	100	79	100	100	93	100	100	100	93	100	93	93	93	100	100	100	93	100	
Gatunda	100	100	100	100	100	100	100	100	100	78	89	100	89	100	100	100	78	100	100	100	89	89	100	100	100	67	100	100	100	89	100	100	100	100	100	100	100	100	100	89	100	100	100
Ngarama	88	100	100	100	100	100	88	100	100	100	100	100	100	100	100	100	75	100	100	100	100	100	100	100	100	88	100	100	100	88	100	100	100	100	100	100	100	88	100	88	88	100	
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	100	92	100	100	100	100	100	100	100	100	100	100	100	
Gahini	100	100	100	100	100	89	89	89	78	100	100	78	100	100	100	100	100	78	78	100	100	100	100	89	100	67	78	100	89	100	89	100	78	100	100	89	100	89	89	100	89	100	89
Rwinkwavu	100	88	100	100	100	100	100	100	100	88	88	88	100	63	75	100	88	100	100	100	100	100	100	100	100	88	88	88	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Kibungo	94	100	94	100	100	100	100	100	100	100	100	100	100	94	100	100	100	94	94	100	100	100	100	100	94	100	100	100	94	100	94	100	100	100	100	100	100	94	100	94	100		
Kirehe	100	100	100	100	95	95	100	100	100	100	90	95	100	100	100	100	85	95	95	100	100	100	100	95	100	85	100	100	95	95	85	100	100	100	100	100	100	100	90	100	90	95	
Rwamagana	76	65	53	82	76	88	100	100	100	94	100	100	94	94	100	88	71	94	94	100	94	88	88	88	88	89	100	94	100	94	94	82	94	88	88	94	82	88	94	88	100	100	
Nyamata	100	88	76	94	88	94	94	100	88	100	88	100	94	76	100	100	76	100	100	82	94	88	100	94	88	47	76	94	82	76	82	94	88	88	94	82	88	94	88	100	65	100	
Kinihira	100	100	100	100	89	100	89	67	100	89	78	89	100	89	89	89	89	89	89	100	100	100	67	100	89	100	89	78	100	89	100	100	100	100	100	100	100	100	100	100	100	89	
Rutongo	93	87	93	73	100	100	100	100	100	93	93	100	93	100	100	100	100	100	100	93	100	93	93	93	93	100	100	93	100	100	100	100	100	100	100	100	100	93	100	100	100	100	
Gatonde	100	86	100	100	100	100	100	100	100	86	100	100	86	100	100	100	71	100	100	100	100	100	100	100	71	100	100	100	100	100	100	100	86	100	100	100	100	100	100	100	100	100	
Butaro	80	85	80	75	65	90	85	95	90	95	90	85	75	85	95	75	85	85	85	90	85	85	90	95	60	100	95	90	100	85	90	100	100	90	100	90	90	90	90	95			
Ruli	100	100	100	100	100	100	90	100	100	100	90	100	100	100	90	100	100	100	100	100	100	100	100	100	90	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Nemba	100	100	89	100	100	89	100	100	100	89	78	100	100	78	100	100	67	89	89	100	100	89	100	89	89	89	89	100	100	100	100	100	100	78	100	100	100	89	100	100	100		
Ruhengeri	94	89	89	100	83	89	83	72	94	94	94	78	94	83	89	89	89	100	100	94	89	89	100	100	89	89	100	94	89	94	94	100	89	89	100	100	94	100	100	100	100		
Byumba	96	100	96	96	88	96	100	100	96	96	96	96	81	96	96	96	96	96	96	100	96	96	100	96	96	96	100	100	100	100	100	100	100	100	100	96	96	100	96	100	100		
CHUB	0	100	100	100	100	100	0	0	0	0	100	100	0	100	100	0	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Kabutare	84	89	89	95	84	89	89	89	84	95	74	100	100	79	100	100	53	95	95	100	100	100	84	89	95	79	95	100	95	95	100	100	100	89	95	95	95	95	100	100	100	100	
Kabgayi	100	92	92	85	92	77	92	85	85	100	92	92	92	69	92	92	69	100	100	100	92	100	92	92	92	92	100	100	100	92	100	92	100	100	100	100	100	100	100	85	92		
Kibizi	100	100	100	100	100	82	100	100	100	100	82	91	82	91	91	91	100	100	100	100	100	100	100	100	100	91	100	100	100	100	100	100	100	100	100	91	100	100	100	100	91		
Gakoma	83	100	100	100	83	67	83	100	83	100	100	100	67	50	83	67	50	83	83	83	67	100	83	50	100	83	100	100	100	100	100	100	83	100	100	83	100	100	100	100	83		
Gitwe	100	100	89	89	89	78	100	78	100	100	89	89	100	67	100	78	44	89	89	100	89	89	89	100	100	56	89	100	89	100	89	100	89	89	100	100	100	100	100	100	100	100	
Ruhango	88	88	88	100	88	88	75	88	88	88	100	63	75	50	63	50	38	75	75	63	75	63	100	63	100	75	100	100	75	88	100	63	88	88	100	100	100	100	75	88			
Remera	100	100	100	100	100	100	100	100	100	100	93	100	93	93	93	100	93	93	93	100	93	93	87	100	93	100	100	93	100	93	100	93	100	93	100	93	100	93	87	93	100		
Rukoma	100	100	100	93	100	100	100	100	100	100	93	100	93	93	93	100	93	93	93	100	93	93	87	100	93	100	100	93	100	93	100	93	100	93	100	93	100	93	87	93	100		
Nyanza	84	84	89	79	74	100	89	84	63	89	84	74	68	47	89	95	47	89	89	89	84	95	89	95	95	74	84	95	79	95	95	95	95	95	95	89	100	89	95	89	100		
Kigeme	77	69	92	92	100	92	100	92	100	100	92	100	92	46	100	85	46	100	100	92	92	100	92	100	92	100	100	100	100	100	85	100	100	100	100	100	92	100	92	92	92		
Kaduha	100	90	90	100	100	100	100	100	90	100	100	90	90	80	90	100	60	90	90	90	90	100	90	80	100	70	90	100	100	100	100	100	100	100	100	100	100	100	90	100	100		
Munini	100	94	100	100	100	94	94	100	100	94	88	94	100	82	100	100	88	82	82	88	94	88	100	88	100	100	100	94	100	94	94	100	100	100	100	94	100	94	100	100	94		
Bushenge	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	63	100	100	100	100	100	100	100	88	88	88	75	100	100	88	88	100	100	100	100	100	100	100	100	100		
Kibogora	100	100	100	100	100	100	93	100	100	100	100	100	100	100	93	93	86	100	100	93	100	100	100	100	93	100	100	93	100	100	100	100	100	100	100	100	100	100	100	100	100		
Kibuye	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	92	92	100	92	85	100	92	100	100	100	100	92	100	92	100	92	100	92	100	92	92	100	100			
Kirinda	100	100	100	100	100	100	100	100	100	100	100	100	100	83	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			
Mugonero	100	100	100	100	86	100	100	100	100	100	86	100	100	86	100	100	86	100	100	100	100	86	100	86	86	86	86	100	100	100	100	100	100	100	100	100	100	86	100	86	100		
Shyira	100	100	100	100	88	100	100	100	100	100	100	94	88	94	100	79	100	100	100	94	94	76	88	100	82	100	94	82	94	88	94	100	100	100	94	100	94	100	94				

