



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 34 – 2023

(21-27 August 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 34

Event Based Surveillance (EBS) Highlights:

- During the epidemiological week 34, eight alerts were notified through the electronic Community Event Based Surveillance System (eCBS), there were 6 human deaths, 1 event of human illness, 1 dog bite.
- One alert was identified through the Epidemic Intelligence from Open Source (EIOS): COVID hospitalizations climb 22% this week and the CDC predicts further increases as new variants spread.

Indicator Based Surveillance (IBS) Highlights:

- 401 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, chicken pox, bacterial meningitis and typhoid fever.
- 8 weekly reportable diseases and health events are being reported on weekly basis, they 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. A thorough analysis conducted for Epi Week 34 revealed that, non-bloody diarrhea for under 5 years and rabies exposure crossed the epidemic threshold.
- A total of 64 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 reported in week 34

In the Epi Week 34, there was eight outbreaks in Rwanda:

- Ongoing Measles outbreak in Kirehe District
- Ongoing Cholera outbreak in Rubavu district
- Six foodborne illness outbreaks occurred respectively in Rwamagana district (Fumbwe and Karengwe sectors), Nyanza, Burera, Ngororero and Kayanza districts.

Completeness and timeliness

In Epi Week 34, 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 34

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 34, eight alerts were received from community:

- 6 deaths:
 - 1 alert from Rutsiro District
 - 2 alerts from Bugesera District
 - 2 alerts from Ngororero District
 - 1 alert from Ngoma District
- 1 alert of Dog bite:
 - 1 alert from Gicumbi district. This case was referred to Byumba DH for further management.
- 1 alert of Human Illness
 - 1 alert from Nyanza district. This alert is about the food poisoning reported by Nyanza DH.

MEDIA SCAN

During the Epi week 34, one alert was received through Epidemic Intelligence from Open Source (EIOS):

COVID hospitalizations climb 22% this week and the CDC predicts further increases as new variants spread.

The Centers for Disease Control and Prevention is now forecasting an acceleration in new COVID-19 hospitalizations over the coming month, the agency said this week, replacing a previous projection that admissions would "remain stable or have an uncertain trend." It comes as health officials are racing to study a new highly mutated COVID variant called BA.2.86, nicknamed "Pirola" on social media, that has begun to emerge around the world. While officials say it is too early to know whether the strain will drive a further surge in COVID hospitalizations, the variant's broad number of mutations has prompted worldwide scrutiny.

Existing COVID-19 tests and medications "appear to be effective with this variant," the CDC said in a risk assessment published Wednesday, and updated vaccines scheduled to be rolled out next month are expected to "be effective at reducing severe disease and hospitalization" from BA.2.86.

But the strain's large number of mutations could also pose new challenges for immunity from prior infections and vaccinations, the agency warns. Further research with the BA.2.86 strain will be needed to better understand BA.2.86's potential impact.

How are COVID hospitalizations trending?

Trends in cases have been difficult to monitor meaningfully after the end of the public health emergency. Officials have leaned on figures still being reported from hospitals, like new admissions and emergency room visits, to track upticks in the virus. Before BA.2.86's emergence, new admissions of patients with COVID-19 had already been climbing. Experts think this uptick in hospitalizations was mostly from infections caused by other less-mutated variants, similar to waves seen during previous summers. Weekly new hospitalizations jumped 21.6% this past week, the CDC said, marking a fifth straight week of increasing admissions.

No unusual uptick in hospital trends so far has been spotted in places that reported early cases of BA.2.86 compared to neighboring regions, the CDC said, though officials will be closely monitoring rates in the weeks to come.

<https://www.cbsnews.com/news/covid-hospitalizations-spike-22-percent-cdc-predicts-increase-new-variants-2023/>

WEEKLY UPDATES ON INDICATOR BASED SURVEILLANCE (IBS) EPIDEMIOLOGICAL WEEK 34

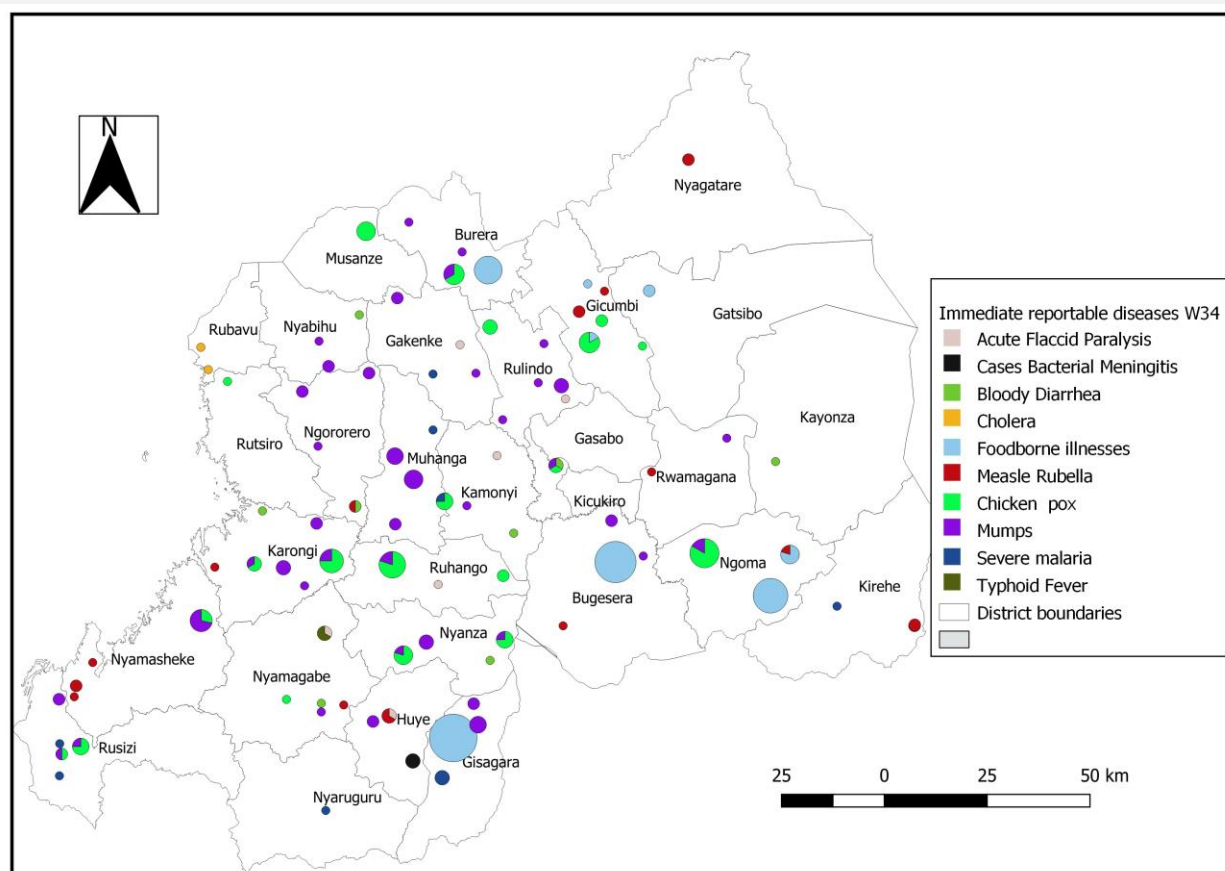
Description: *Rwanda has been implemented Indicator Based Surveillance according to the IDSR 3rd guidelines where approximately 45 priority diseases, health conditions and public health events are being monitored and reported from health facilities countrywide on a regular basis. Diseases that are prone 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 34

During Epi week 34; 401 cases of immediate reportable diseases were notified. They included 107 cases of foodborne illness, 81 cases of mumps, 128 cases of chicken pox, 22 suspected cases of bloody diarrhea, 32 suspected cases of measles/rubella, 16 confirmed cases of severe malaria, 6 suspected cases of acute flaccid paralysis, 1 case of cholera confirmed by RDT, 5 cases of suspected bacterial meningitis, 3 cases of typhoid fever. (See figure below).

Notes:

- For the 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.

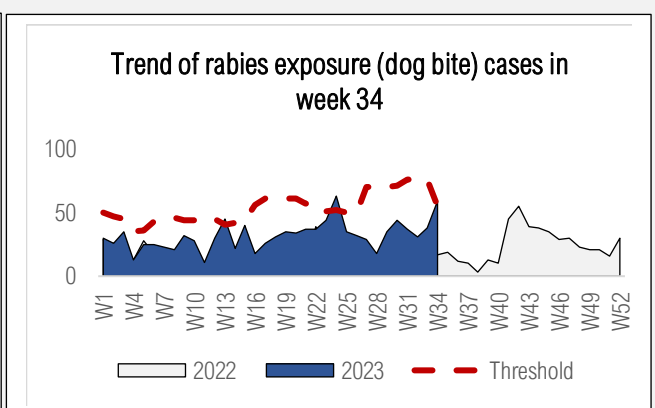
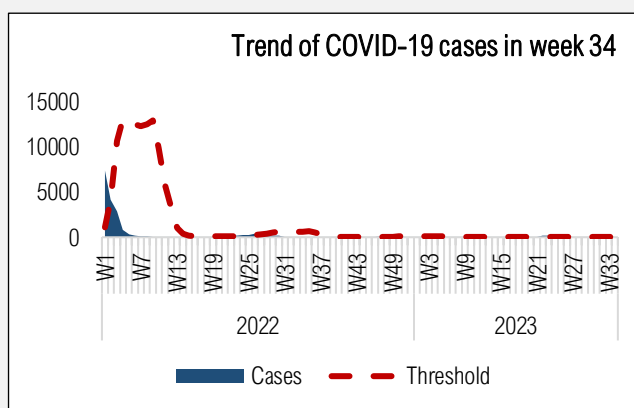
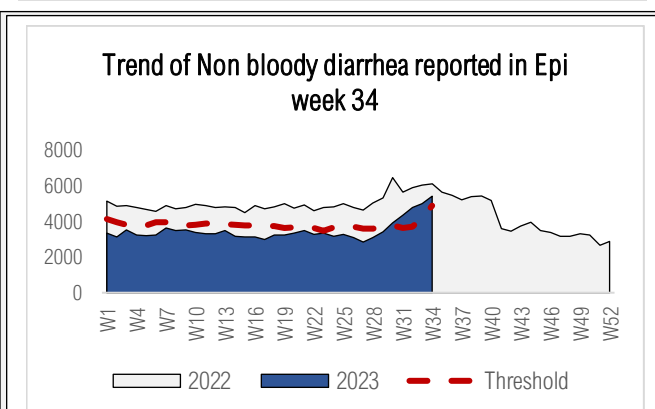
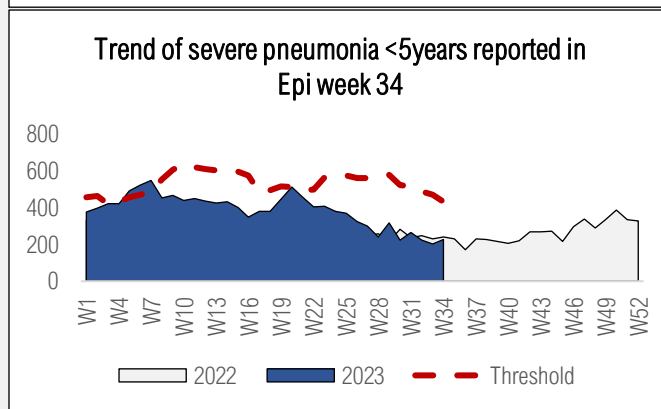
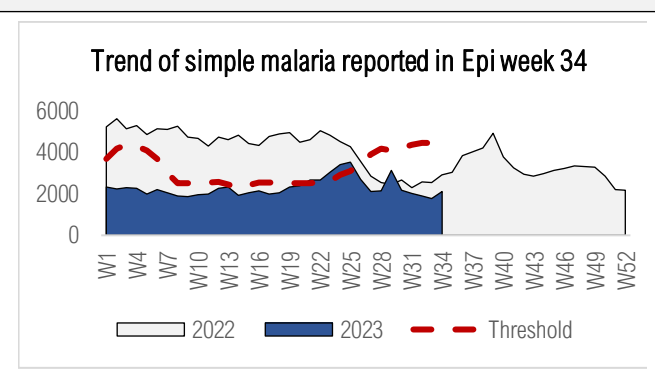
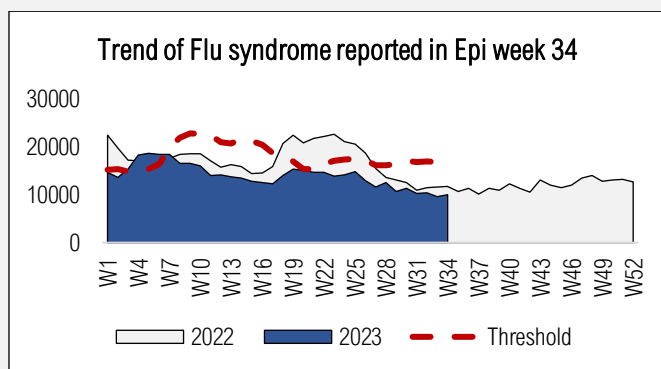


Distribution of immediate reportable diseases in Epi week 34

WEEKLY REPORTABLE DISEASES – EPI WEEK 34

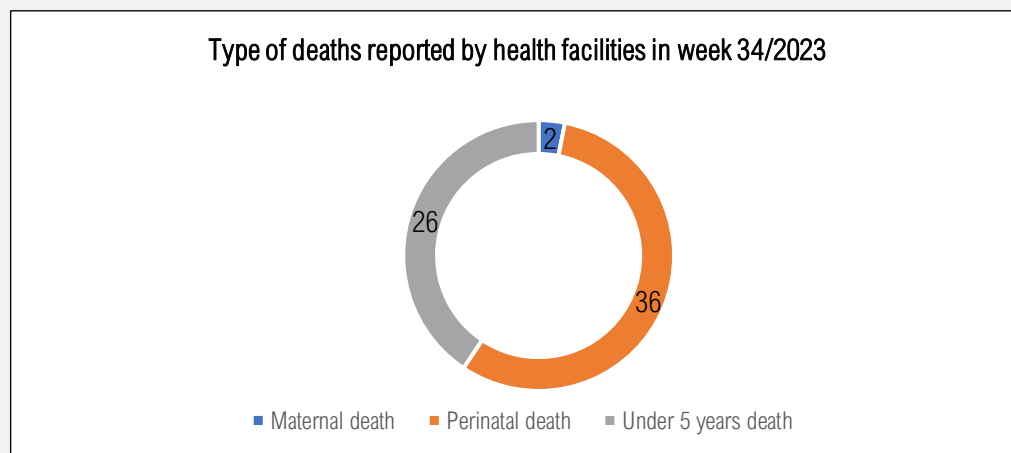
Description: In Rwanda, after the adaptation of the IDSR 3rd edition, eight diseases & events are being reported and analyzed on a weekly basis. These include flu syndrome, simple malaria, severe pneumonia for under 5 years, non-bloody diarrhea for under 5 years, COVID-19, dog bites, brucellosis, and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

In Epi Week 34, 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 non-bloody diarrhea for under 5 years cases and rabies exposure crossed the epidemic threshold. A deep follow up is recommended.



B. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 34

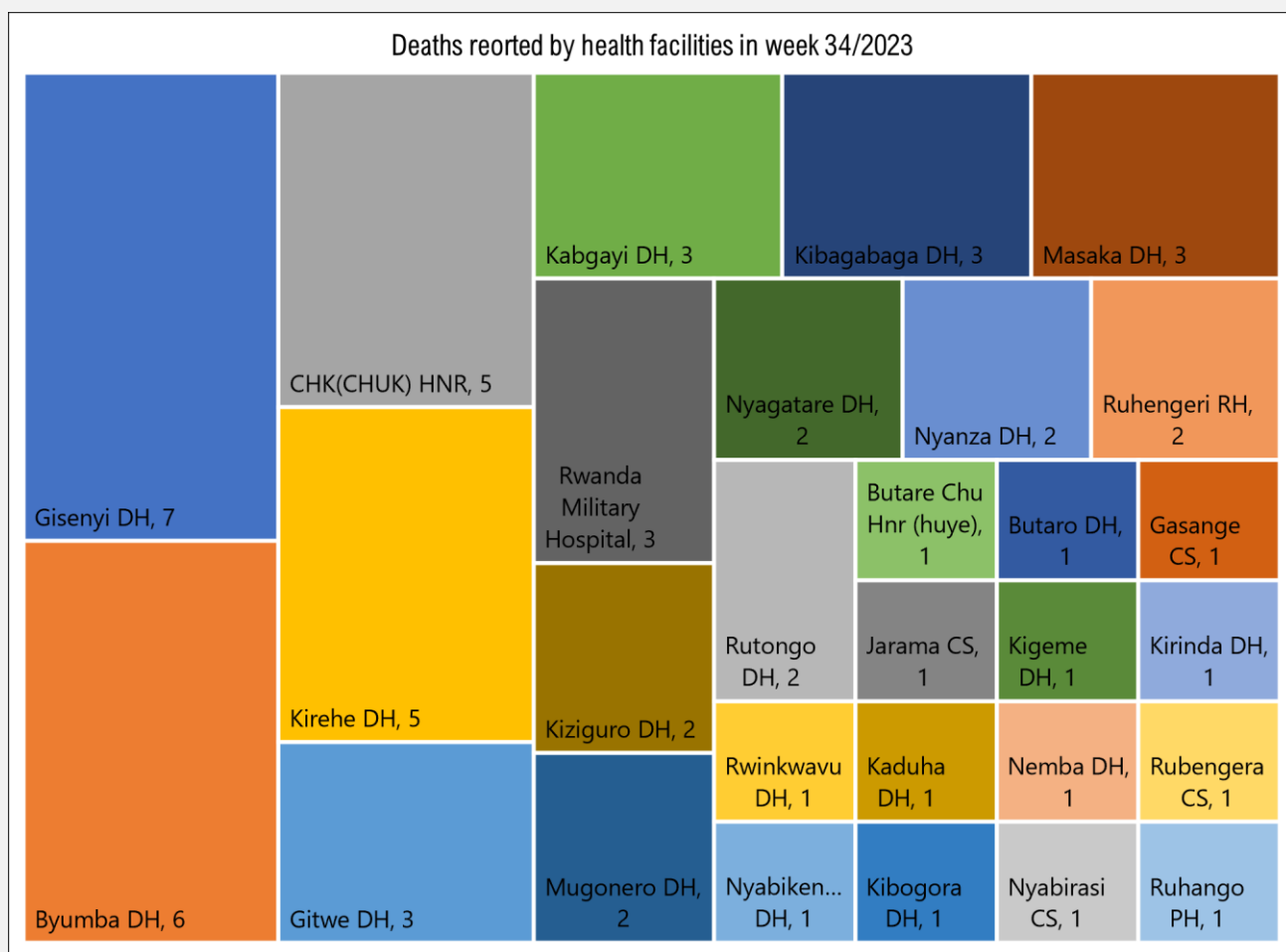
In Epi week 34, as summarized in the Pie Chart below, a total number of 64 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 36(56%) were classified as perinatal, 26 (41%) were deaths of children under 5 years old (included 1 death due to non-bloody diarrhea) and 2(3%) maternal deaths.



Cause of deaths declared in epi week 34

Deaths were reported from various catchment areas as follow:

- 7 deaths were reported in Gisenyi DH
- 6 deaths were reported in Byumba DH
- 5 deaths were reported respectively in Kirehe DH and CHUK
- 3 deaths were reported respectively in Gitwe DH, Kabgayi DH, Kibagabaga DH and Rwanda military hospital
- 2 deaths were reported respectively in Kiziguro DH, Mugonero DH, Nyagatare DH, Nyanza DH, Ruhengeri RH, Rutongo DH and Rwinkwavu DH.
- 1 death was reported respectively in Butaro DH, Nyabikenke DH, Kaduha DH, CHUB, Kibogora DH, Kigeme DH, Kirinda DH, Nemba DH, Ruhango PH, Jarama HC (in Kibungo RH), Nyabirasi HC (in Murund DH), Rubengera HC (in Kibuye RH) and Gasange HC (in Kiziguro DH).



OUTBREAK AND EVENT UPDATES EPIDEMIOLOGICAL WEEK 34

1. ONGOING MEASLES OUTBREAK IN MAHAMA REFUGEE CAMP, KIREHE DISTRICT

Confirmed cases	30	Date reported:	February 27, 2023	Risk assessment	Low
Epi link cases	78	Source:	NRL, eIDSR		
Death(s)	0	District/HFs:	Kirehe/Mahama Refugee Camp		
Total cases	108	Geoscope:	Low		

Outbreak description: The measles outbreak is still ongoing in Kirehe district since 27th February 2023.

As of August 28, 2023, no additional cases were identified in Mahama Refugee camp by laboratory confirmation, which makes it a total of 30 laboratory confirmed cases, while 6 suspected cases were reported during Epi week 34, then there was 78 cases confirmed by epidemiological link. The samples were taken and sent to NRL; results are pending.

Ongoing interventions:

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

2. ONGOING CHOLERA OUTBREAK IN RUBAVU DISTRICT

Confirmed cases	54	Date reported:	June 14, 2023	Risk assessment	Low
Suspected cases	0	Source:	eIDSR		
Death(s)	1	District/HFs:	Rubavu/ Kigufi HC,		
Total cases	54	Geoscope:	Low		

Outbreak description: On 13/06/2023, Kigufi health center, in Rubavu district recorded 2 suspected cases of cholera. This was followed by notification of other 2 cases on June 14 and 15, 2023, respectively. Six stool samples were taken for culture, and all tested positive by pre-culture rapid test. Of them, three were tested positive for *Vibrio Cholerae/ Inaba* on 18/06/2023.

As of 27/08/2023; 54 cases meeting cholera case definition have been recorded with 4 confirmed by stool culture and 50 confirmed by RDTs, (including 1 new cases registered). For the outcome of patients, 53 were cured, 1 died (a female aged of 14) and no cases are admitted and no critical case reported. The source of infection was the use of unsafe water, poor hygiene and sanitation.

Interventions:

- Case management
- Enhance risk communication and community engagement on prevention and control measures
- Reinforce community awareness on IPC, hygiene and sanitation and wash strategies toward cholera prevention
- Reinforce community surveillance for early detection and active search of new cases

3. FOODBORNE ILLNESS OCCURRED IN RWAMAGANA DISTRICT, KARENSE SECTOR, KANGAMBA CELL, KANGAMBA VILLAGE

Confirmed cases	0	Date reported:	August 24, 2023	Risk assessment	Low
Suspected cases	13	Source:	eIDSR		
Death(s)	0	District/HFs:	Karense HC/ Rwamagana PH		
Total cases	13	Geoscope:	Low		

Outbreak description:

On 24/08/2023, patients consulted in Karense HC after consuming sorghum beer in a wedding ceremony held on 22/08/2023. They presented abdominal pain, diarrhea, and vomiting. A total of 13 cases were recorded, among them 9 cases were hospitalized. Currently, all patients are treated and discharged.

Interventions conducted:

- Case management of the patients

- Stool samples were collected at the health center and revealed white blood cells and intestinal parasites.

4. **FOODBORNE ILLNESS OCCURRED IN RWAMAGANA DISTRICT, FUMBWE SECTOR, NYAKAGUNGA CELL, KIREHE VILLAGE**

Confirmed cases	0	Date reported:	August 25, 2023	Risk assessment	Low
Suspected cases	40	Source:	eIDSR		
Death(s)	0	District/HFs:	Nyagasambu HC/ Rwamagana PH		
Total cases	40	Geoscope:	Low		

Outbreak description:

On the 25/08/2023, 40 cases consulted Nyagasambu HC with diarrhea, vomiting and abdominal pain following consuming sorghum beer in a wedding ceremony. Among the 40 cases, 1 was referred to Rwamagana PH while the remaining were treated by the health center. Currently, all patients are treated and discharged. The possible cause of the foodborne illness was the sorghum beer (ubushera).

Interventions conducted:

- Case management of the patients
- Four stool sample were collected at health center and sent to NRL.

5. **FOODBORNE ILLNESS OCCURRED IN NYANZA DISTRICT, BUSASAMANA SECTOR, NYANZA CELL, KIVUMU VILLAGE**

Confirmed cases	0	Date reported:	August 21, 2023	Risk assessment	Low
Suspected cases	8	Source:	eIDSR		
Death(s)	0	District/HFs:	Nyanza DH		
Total cases	8	Geoscope:	Low		

Outbreak description:

On 21/08/2023, 8 patients have consulted Nyanza DH with similar symptoms of abdominal pain, diarrhea, and vomiting following consuming sorghum beer (Ubushera). All 8 patients were admitted in Nyanza DH. Currently, they are treated and discharged.

Interventions conducted:

- Case management of the patients
- Stool samples were collected at the health center and sent to NRL.

6. **FOODBORNE ILLNESS OCCURRED IN BURERA DISTRICT, KIVUYE SECTOR, NYIRATABA CELL, BUKUMBI VILLAGE**

Confirmed cases	0	Date reported:	August 20, 2023	Risk assessment	Low
Suspected cases	36	Source:	eIDSR		
Death(s)	0	District/HFs:	Kivuye HC		
Total cases	36	Geoscope:	Low		

Outbreak description:

On 20/08/2023, a total of 36 cases consulted Kivuye HC presenting headache, abdominal pain, vomiting, fever and diarrhea after consuming sorghum beer (Ubushera) in a wedding ceremony held in this village on 19/08/2023. No critical cases were reported. The possible cause of the food poisoning was the sorghum beer (ubushera). Currently, they are treated and discharged.

Interventions conducted:

- Case management of the patients
- Health education and sensitization about food hygiene

7. FOODBORNE ILLNESS OCCURRED IN KAYONZA DISTRICT, MWIRI SECTOR, NYARUGARI CELL, KIGARAMA VILLAGE

Confirmed cases	0	Date reported:	August 23, 2023	Risk assessment	Low
Suspected cases	9	Source:	eIDSR		
Death(s)	0	District/HFs:	Kageyo HC/Gahini DH		
Total cases	9	Geoscope:	Low		

Outbreak description:

On 23/08/2023, a total of 9 cases consulted Mwiri and Kageyo HCs presenting abdominal pain, vomiting, and diarrhea after consuming sorghum beer (Ubushera). The patients were referred to Rwinkwavu DH for further management. Currently, they are treated and discharged.

Interventions conducted:

- Case management of the patients
- Stool samples were collected at the district hospital and sent to NRL

8. FOODBORNE ILLNESS OCCURRED IN NGORORERO DISTRICT, NYANGE SECTOR, NSIBO CELL, CYAMBOGO VILLAGE

Confirmed cases	0	Date reported:	August 26, 2023	Risk assessment	Low
Suspected cases	3	Source:	eIDSR		
Death(s)	1	District/HFs:	Nyange B HC/Muhororo DH		
Total cases	3	Geoscope:	Low		

Outbreak description:

On 26/08/2023, a total of 3 people including 2 adults and 1 child of the same family presented diarrhea, vomiting and generalized body weakness. This event occurred after eating a meal of Cassava mixed with beans. On 27/08/2023, their condition worsened, and they were taken to Nyange B HC. Unfortunately, the child died on the way to the HC, the remaining two patients were immediately transferred to Muhororo DH. The possible cause




was due to consumption of unsafe meal (Cassava mixed with beans). Currently, they are treated and have recovered.

Interventions conducted:

- Case management of the patients
- Preparatory of the child burial

eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 34

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 34, 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%), that was to be appreciated. For the timeliness, the overall score was 97%, almost all hospitals had the high timeliness (>80%), except two hospitals that had the moderate score (Kibagabaga DH and Nemba DH) and one hospital with low score (Kacyiru police hospital).

Notes: The health facilities that did not have a high score for the timeliness had been recommended to improve the reporting by submitting weekly surveillance reports not later than Monday before 12:00.

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

Hospital catchment area	Completeness																																		
	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	
Nyagatare	100	100	100	100	100	86	93	93	100	93	100	100	86	93	100	100	100	94	86	100	86	100	100	100	100	100	93	100	100	100	100	100	93	100	
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	100	89	100	100	100	100	100	100	100	
Ngarama	88	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	
Kiziguro	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	100	92	100	100	100	
Gahini	100	100	100	100	100	100	89	89	78	100	100	78	100	100	100	100	100	78	100	100	100	100	100	100	89	100	100	100	100	100	100	100	89	100	
Rwinkwavu	100	100	100	100	100	100	100	100	100	100	100	88	100	88	88	88	100	100	100	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	94	100	100	100	100	94	100	100	100	100	100	94	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	100	100	100	100	100	100	100	100	95	95	100	100	100	
Rwamagana	76	71	88	100	100	94	100	100	94	100	88	94	100	100	100	100	100	94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nyamata	100	94	100	94	100	100	100	100	100	100	100	100	100	100	100	100	88	88	100	94	100	94	100	100	88	88	88	94	100	88	100	88	94	100	
Kinihira	100	100	100	100	100	100	89	89	100	89	89	100	89	89	89	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Rutongo	93	87	93	87	100	100	100	100	100	93	93	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Gatonde	100	86	100	100	100	100	100	100	100	86	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
Butaro	80	85	95	95	75	90	95	95	95	100	95	100	95	100	100	95	100	95	100	90	100	100	100	100	95	75	100	100	100	100	85	95	100	100	100
Ruli	100	100	100	100	100	100	100	100	100	100	90	90	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nemba	100	100	100	100	100	89	100	100	100	89	100	100	89	100	100	100	100	89	100	100	100	89	100	100	100	100	100	100	100	100	100	100	100	100	100
Ruhengeri	94	94	94	100	83	89	89	89	100	94	94	83	94	89	94	89	94	94	100	100	89	100	100	100	100	100	100	100	100	94	100	100	94	89	
Byumba	96	100	100	96	96	96	100	100	100	96	100	96	96	92	100	100	100	96	100	96	100	100	96	100	100	100	100	100	100	100	100	100	100	100	100
CHUB	0	100	100	100	100	100	100	100	0	0	100	100	0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Kabutare	84	95	100	100	95	95	95	95	89	95	95	100	100	89	100	100	89	95	100	100	100	100	89	100	100	89	100	100	100	95	100	100	100	100	100
Kabgayi	100	100	92	85	100	92	92	92	92	100	100	92	92	85	100	100	92	100	100	100	92	100	100	100	100	92	100	100	100	100	100	100	100	100	100
Kibilizi	100	100	100	100	100	100	100	100	100	100	100	82	91	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Gakoma	83	100	100	100	83	100	100	100	83	100	100	100	67	100	100	100	83	83	67	100	100	100	100	100	100	100	83	100	100	100	100	100	100	100	100
Gitwe	100	100	89	100	100	78	100	100	100	100	100	100	89	100	100	78	89	100	100	89	100	89	100	100	100	67	100	100	100	100	100	100	89	100	100
Ruhango	88	100	100	100	88	88	75	88	88	100	100	63	75	63	63	75	50	88	75	63	88	63	100	100	75	100	100	88	88	100	75	88	100	100	100
Remera	100	100	100	93	100	100	100	100	100	100	100	93	100	100	100	100	100	93	100	100	93	93	93	100	100	100	100	100	100	93	100	100	100	100	
Nyanza	84	84	89	79	95	100	89	89	74	95	100	79	79	89	100	100	95	89	100	100	84	100	95	100	100	89	100	100	84	100	100	95	95	100	100
Kigeme	77	77	100	92	100	92	100	100	100	100	92	100	92	85	100	100	100	100	100	92	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Kaduha	100	90	100	100	100	100	100	100	100	100	100	100	90	100	100	100	90	90	90	90	90	100	100	80	100	90	100	100	100	100	100	100	100	100	100
Munini	100	94	100	100	100	94	100	100	100	100	100	100	100	100	100	100	94	88	94	100	94	100	94	100	100	94	100	100	100	100	100	100	100	100	100
Bushenge	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	88	100	88	100	100	100	100	100	100	100	88	75	100	100	88	88	100	100	100
Kibogora	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	93	100	100	93	100	100	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	100	100	100	92	92	100	100	100	100	100	100	100	100	100	100	92	100	100
Kirinda	100	100	100	100	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
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	100	100	100	100	100	100	100	100
Shyira	100	100	100	100	100	88	100	100	100	100	100	100	94	94	100	100	94	100	76	100	94	100	76	88	100	100	100	94	82	94	88	94	100	100	
Muhororo	100	100	100	100	100	100	100	100	100	100	100	100	90	100	100	100	100	80	100	100	90	100	100	100	100	90	100	100	100	100	100	100</			

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