



# WEEKLY EPIDEMIOLOGICAL BULLETIN

## WEEK 03 – 2024

(15-21 January 2024)

### 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 03/2024

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

- During the epidemiological week 03, one human death and one signal of human illness were notified through the electronic Community Event Based Surveillance System (eCEBS)
- Three alerts were identified through the Epidemic Intelligence from Open Source (EIOS):
  - US records about 11,000 deaths from flu this season: CDC
  - Mysterious Disease X will be 20 times more deadly than Covid, said a senior WHO official
  - The increase of suspected Influenza-like Illness at Ruhango Health Center/Ruhango District

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

- 228 immediate reportable diseases were notified by health facilities countrywide. These include the cases of acute flaccid paralysis (AFP), mumps, severe malaria; bloody diarrhea, measles/rubella, severe malaria, Acute hemorrhagic fever, typhoid fever, snake bite and chicken pox.
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for Epi Week 03 revealed that flu syndrome, severe pneumonia and Covid19 surpassed the epidemic thresholds.
- A total of 64 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. The majority of deaths were perinatal deaths and deaths of children under 5 years.

#### Outbreaks and events updates in week 03

- Foodborne illness outbreak in Burera district and Karongi district
- Increase in cases of influenza like illness in Ruhango district

#### Completeness and timeliness

In Epi Week 03, the overall completeness and timeliness of surveillance data reporting in Rwanda was 100% and 98% respectively.

## WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 03

**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 03, one human death and a signal of human illness were notified from community through eCBS:

- 1 human death from Ngororero District / Mwiyanike village
- 1 signal of Human Illness from Karongi District / Ngoma Village

### MEDIA SCAN

Two alerts were notified:

#### 1. US records about 11,000 deaths from flu this season: CDC

There have been at least 16 million flu illnesses, 180,000 hospitalizations, and 11,000 deaths from flu so far this season in the US, according to the latest data released by the US Centers for Disease Control and Prevention (CDC). Seasonal influenza activity remains elevated in most parts of the country.

A total of 47 flu-associated pediatric deaths have been reported in the US this season, according to CDC on Friday. After several weeks of increases in key flu indicators through the end of 2023, two weeks of decreasing or stable trends nationally have been noted, said CDC. The agency will continue to monitor for a second period of increased influenza activity that often occurs after the winter holidays.

<https://odishatv.in/news/international/us-records-about-11-000-deaths-from-flu-this-season-cdc-225571>

#### 2. Mysterious Disease X will be 20 times more deadly than Covid, said a senior WHO official

Reportedly, a meeting titled 'Preparing for Disease X' was spotted by the observers in the WEF agenda. Experts believe that the mysterious Disease X could cause 20 times more deaths than a coronavirus pandemic. The cause of mysterious Disease X is currently unknown, yet it is considered a serious microbial threat.

<https://www.metroecuador.com.ec/noticias/2024/01/21/misteriosa-enfermedad-x-sera-20-veces-mas-mortal-que-el-covid-afirmo-un-alto-funcionario-de-la-oms/>

#### 3. The increase of suspected Influenza-like Illness at Ruhango Health Center/Ruhango District.

According to a report by [Umuseke.rw](#) on January 18, 2024, 70 students from [GS Indangaburezi](#) developed illnesses simultaneously and consulted [Kibingo HC](#). However, the HC name mentioned by Umuseke does not

exist. After receiving this information, PHEOC South in collaboration with Ruhango PH staff did the follow up, the details are found in the part of updates on outbreak.

<https://umuseke.rw/2024/01/ruhango-abanyeshuri-basaga-70-bo-mu-ndangaburezi-barwariye-rimwe/?fbclid=IwAR0Z-PXgPf5tQ2inpk91RrU8kMCWTjPDgKH9wphrJGFRLCDMvSd8yxdgd2o>

## WEEKLY UPDATES ON INDICATOR BASED SURVEILLANCE (IBS)

**Description:** *Rwanda had implemented Indicator Based Surveillance according to the IDSR guidelines 3rd edition 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 weekly basis every Monday before midday.*

### A. IMMEDIATE REPORTABLE DISEASES – EPI WEEK 03

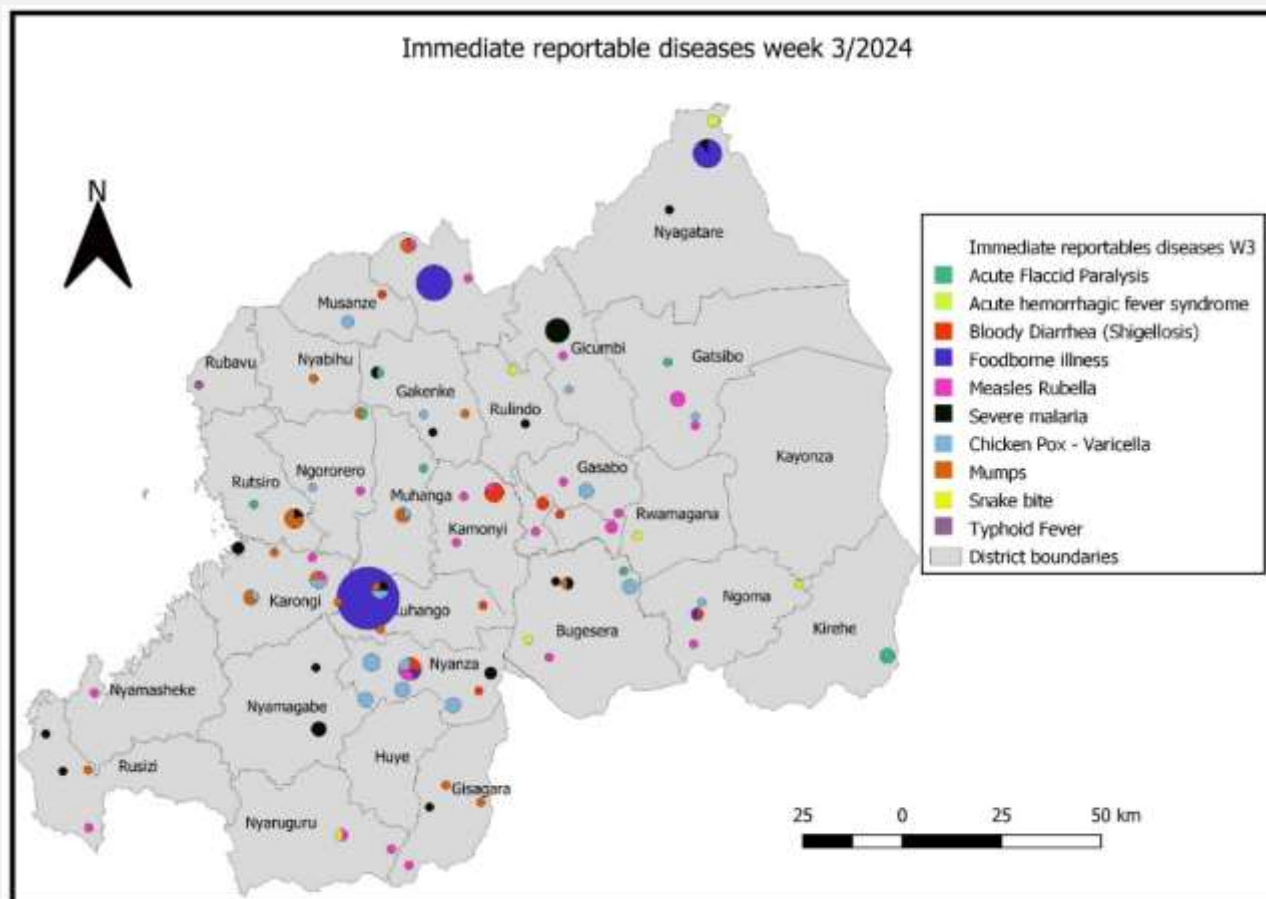
During this Epi week, 228 cases of immediate reportable diseases were notified:

- 39 cases of chicken pox were reported by 20 HFs. No HF crossed the threshold.
- 22 cases of mumps were reported by 16 HCs. No HF crossed the threshold
- 13 suspected cases of bloody diarrhea (Shigellosis) were reported by 8 health facilities. For samples tested by NRL in the previous week 02, the result of a sample from Biryogo HC was tested positive for *Shigella flexneri* in the stool culture, while other results are still pending.
- 27 suspected cases of Measles/Rubella were reported by 23 HCs. The samples were taken and sent to NRL; results are pending.
- 29 cases of severe malaria were reported by 18 health facilities, including Byumba DH, Gakoma DH, Gatonde DH, Kaduha DH, Kibilizi DH, Kibuye RH, Kigeme DH, Mibilizi DH, Nyagatare DH, Nyamata DH, Nyamata HC, Cyinzuzi HC, Gihundwe HC, Mukura HC, Muyunzwe HC, Ntoma HC, Nyange HC Ruli, Nyarurama Adventist polyclinic
- 9 cases of acute flaccid paralysis were reported by 9 health facilities
- 81 cases of foodborne illnesses were reported by 3 HFs: Kirambo HC (Butaro DH), Munzanga HC (Kirinda DH) and Ntoma HC (Nyagatare DH) .
- 5 snake bite cases were reported by 5 HFs: Coko HC (in Ruli DH) , Gihinga HC (in Nyamata DH), Gituku HC (in Kibungo RH), Kinihira HC (in Kinihira DH), Nyakaliro HC (in Rwamagana PH)
- 1 suspected case of typhoid fever were reported by 1 health facility: 1 case from Polyclinic la Medecale de Rubavu
- 2 cases of suspected AHF reported by Kagitumba HC (Nyagatare DH), the samples were sent to NRL, results were negative

### Notes:

- For the diseases whose cases crossed the thresholds, District Hospitals are recommended to strengthen surveillance, investigate and reinforce control measures accordingly. Concerned hospitals include: Byumba DH, Gakoma DH, Gatonde DH, Kaduha DH, Kibilizi DH, Kibuye RH, Kigeme DH, Mibilizi DH, Nyagatare DH, Nyamata DH, Nyamata HC, Cyinzuzi HC, Gihundwe HC, Mukura HC, Muyunzwe HC, Ntoma HC, Nyange HC Ruli, Nyarurama Adventist polyclinic
- All confirmed cases and suspected cases had been managed at the health facility level.

## Geographical distribution of cases:



Distribution of immediate reportable diseases in Epi week 03

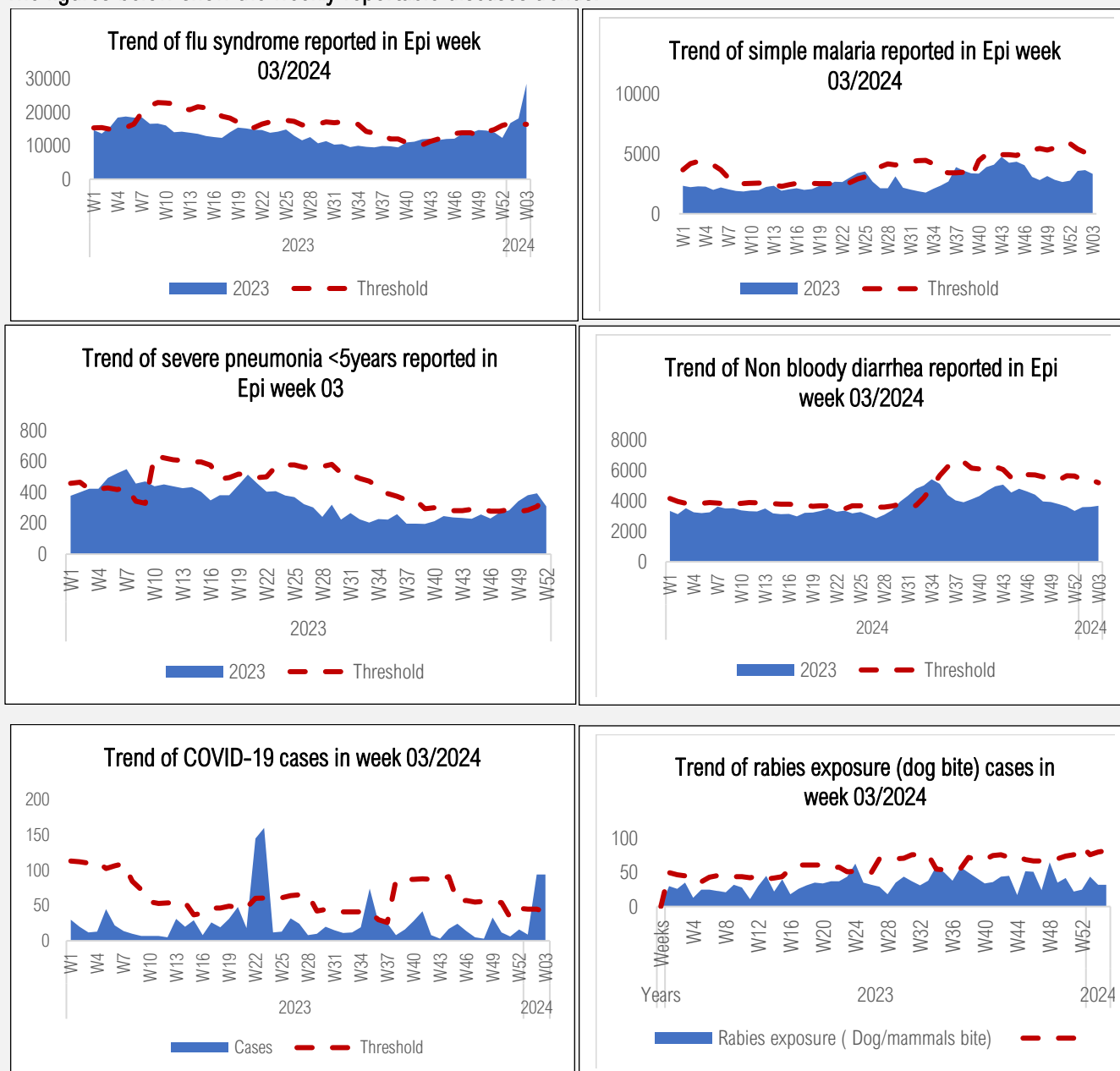
## B. WEEKLY REPORTABLE DISEASES – EPI WEEK 03

**Description:** In Rwanda, after the adaptation of the IDSR guidelines 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 03, 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, severe pneumonia and covid19 cases surpassed the epidemic thresholds. For the flu syndrome, 30/46(65%) DHs surpassed thresholds: Byumba, Gakoma, Gatonde, Gitwe, Kabaya, Kabgayi, Kabutare, Kibagabaga, Kibizi, Kibogora, Kibungo, Mibilizi, Mugonere, Muhororo, Nemba, Nyabikenke, Nyagatare, Nyamata, Nyanza, Nyarugenge, Remera Rukoma, Ruhango, Ruhengeri, Ruli, Rutongo, Rwamagana, Rwinkwavu and Shyira. For severe pneumonia the DHs that surpassed thresholds were the following: Gahini, Gakoma, Gatunda, Kabaya, Kabgayi, Kibizi, Kibungo, Nemba, Ngarama, Nyabikenke, Nyanza, Remera Rukoma, Ruhango, Ruli, Rwinkwavu and Shyira. For Covid19 cases, the DHs that surpassed thresholds were the following: Gihundwe, Gisenyi, Gitwe, Kibagabaga, Kirehe, Kiziguro, Mugonero, Muhororo, Murunda, Nemba, Nyarugenge, Ruhengeri, Ruli and Shyira.

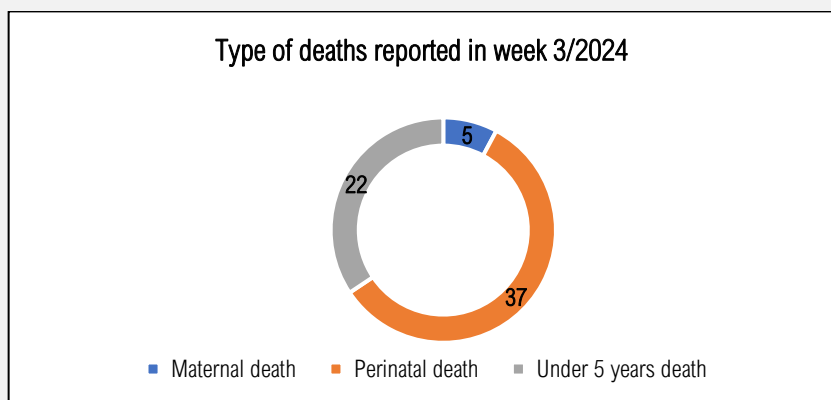
Note: The district hospitals that have the cases that surpassed the thresholds are recommended to conduct an investigation and reinforce preventive and control measures.

The figures below show the weekly reportable diseases trends:



### C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 03

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, 37 (58%) were perinatal, 22 (34%) were deaths of children under 5 years old, and 5 (8%) maternal deaths.

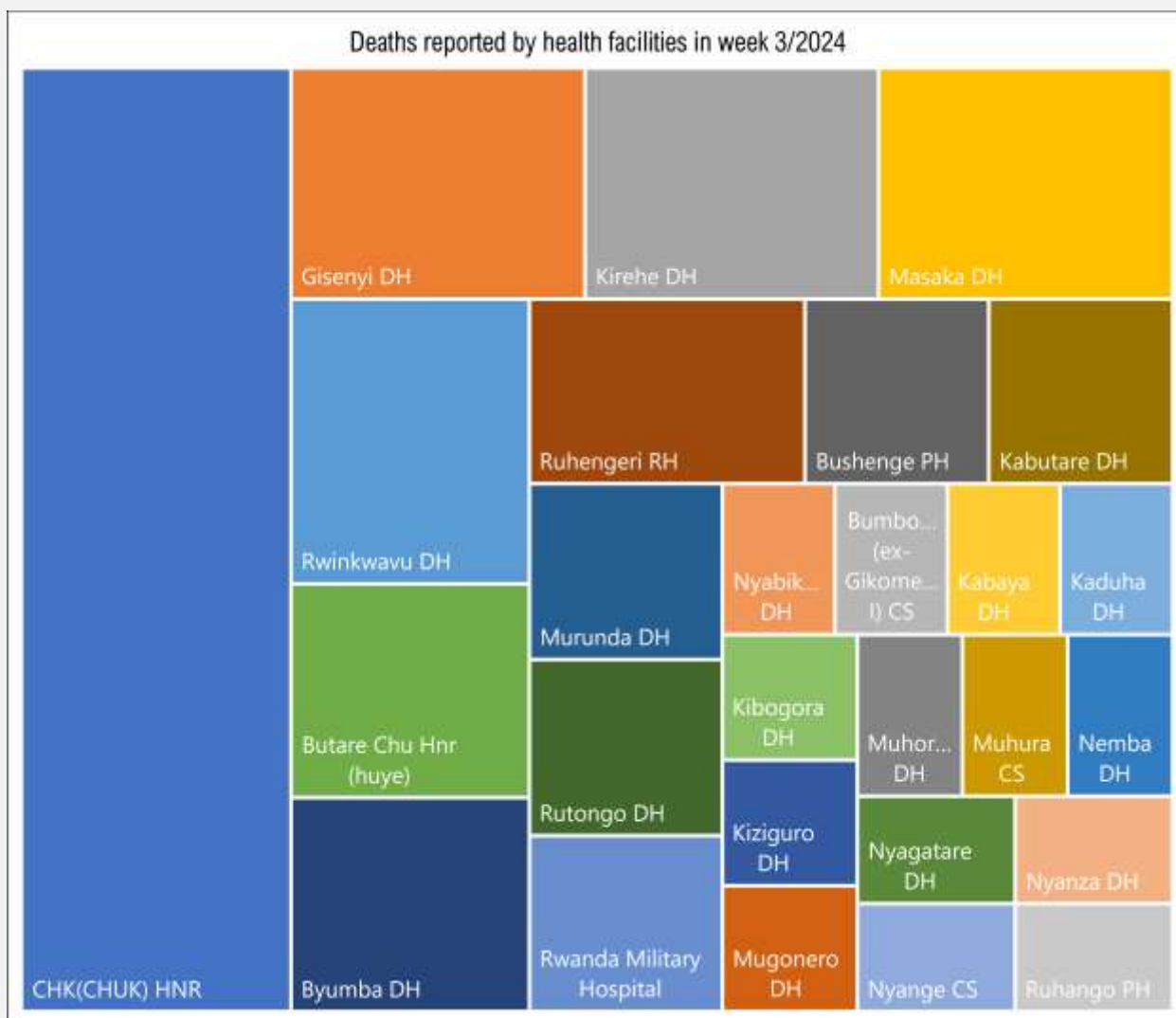


*Cause of deaths declared in epi week 03*

64 deaths were reported from various catchment areas as follow:

- 15 deaths were reported by CHUK: 4perinatal deaths; 8 under 5 years deaths and 3 maternal deaths
- 4 deaths reported respectively by Gisenyi DH, Kirehe DH, Masaka DH (all were 4perinatal deaths) and Rwinkwavu DH (2 perinatal and 2 under 5 deaths)
- 3 deaths were reported respectively by CHUB (2 were perinatal deaths and 1 maternal death), Byumba DH (2 perinatal and 1under 5 deaths) and Ruhengeri RH (2 perinatal and 1under 5 deaths)
- 2 deaths were reported respectively by Bushenge PH (1 perinatal death, 1 under 5 years death), Kabutare DH (2 perinatal deaths), Murunda DH (1perinatal and 1under 5 deaths), Rutongo DH (2 under 5 deaths) and Rwanda Military hospital (1 perinatal and 1under 5 deaths)
- 1 death was reported respectively by Kabaya DH, Kaduha DH, Kiziguro DH, Mugonero DH, Nyagatare DH, Nyanza DH, Ruhango PH, and Muhura HC (in Kiziguro DH) (all were perinatal deaths); Nyabikenke DH, Kibogora DH, Nemba DH, Bumbogo HC (Gikomero in Kibagabaga DH); Nyange HC (in Kibungo RH) (all were under 5 years deaths).





Distribution of deaths by health facilities in Epi week 03

## OUTBREAK AND EVENT UPDATES IN EPIDEMIOLOGICAL WEEK 03

### 1. FOODBORNE ILLNESS OUTBREAK IN BURERA DISTRICT, RUSARABUYE SECTOR

Confirmed cases	0	Date reported:	January 15, 2024	Risk assessment	Low
Suspected cases	17	Source:	eIDSR		
Death(s)	0	District/HFs:	Kirambo HC/Butaro DH		
Total cases	17	Geoscope:	Low		

#### Outbreak description:

On January 15, 2024, Kirambo HC received 17 patients experiencing abdominal pain, vomiting, and diarrhea. All individuals attended the same event where a choir visited EAR Murongozi church on 14/01/2024 and shared Ubushera. The attack rate was 17/45 (37.78%). The affected cases range in age from 1 to 56 years, with a female-to-male ratio of 11:6. No deaths have been recorded.



#### Interventions conducted:

- Case management at Kirambo Health Center, and all patients have been discharged.
- Community case search, awareness, and environmental assessment.

## 2. FOODBORNE ILLNESS OUTBREAK IN KARONGI DISTRICT, MURUNDI SECTOR

Confirmed cases	0	Date reported:	January 19, 2024	Risk assessment	Low
Suspected cases	50	Source:	eIDSR		
Death(s)	0	District/HFs:	Ngoma school/Kirinda DH		
Total cases	50	Geoscope:	Low		

#### Outbreak description:

On January 19th, 2024, Kirinda DH reported suspected cases of food-related illnesses among students at GS Ngoma, a day school situated in Ngoma village, Nyamushishi cell, Murundi sector, Karongi district (within Kirinda DH's catchment area). Patients experienced abdominal pain and nausea with symptoms manifesting around 03:00 PM on January 19, 2024, shortly after consuming maize bread (akawunga) during lunch, a total of 50 individuals (17 males and 33 females) who shared this meal have reported similar symptoms. The attack rate was 4.9% (total students: 1020 comprising 442 males and 578 females). Current care and monitoring were administered at Munzanga Health Center. Almost all cases had been managed in the OPD. One critical case was referred to Kirinda DH for better management. No deaths have been reported.

#### Interventions conducted:

- The RRT from Kirinda and Karongi district has been mobilized for response, and field investigations conducted.
- Case management and the identification of additional potential cases.
- Psychological support (Counselling of students).
- Community awareness is being implemented among students and the general population.
- The sample for maize flour has been taken by RIB for forensic investigation.

## 3. INCREASE OF SUSPECTED INFLUENZA-LIKE ILLNESS AT RUHANGO HEALTH CENTER/RUHANGO DISTRICT

Confirmed cases	0	Date reported:	January 18, 2024	Risk assessment	Low
Suspected cases	75	Source:	eIDSR		
Death(s)	0	District/HFs:	Indangaburezi, APARUDE school, /Ruhango PH		
Total cases	75	Geoscope:	Low		

#### Outbreak description:

According to a report by Umuseke.rw on January 18, 2024, 70 students from GS Indangaburezi simultaneously developed illnesses and sought consultation at Kibingo HC. However, the HC name mentioned by Umuseke does

not exist. After conducting further investigation, PHEOC South, in collaboration with Ruhango PH staff, Ruhango HC, the Head of GS Indangaburezi, the Head of College de Bethel APARUDE Ruhango, and the director of Ruhango District Health Unit, discovered that Ruhango HC had received more cases with symptoms such as runny nose, mild fever, headache, and dry cough.

On Tuesday (16th January), 180 OPD patients consulted Ruhango HC, with most presenting flu symptoms. Among them, 51 out of 1500 students from GS Indangaburezi and 24 out of 1200 students from APARUDE were consulted and discharged on the same day. The medications provided included Paracetamol, chlorpheniramine, and vitamin C. All 50 Covid-19 samples taken returned negative results. Additionally, a total of 20 Influenza Lab samples were collected and sent to NRL, with 11 of them testing positive for influenza type A (FLUA+). Currently, all students are stable and back in their classrooms.

**Interventions conducted:**

- Investigation
- Case management
- Laboratory test

## eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 03

*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 02, the overall completeness and timeliness of disease surveillance data reporting in Rwanda was 100% and 98%, respectively. With regards to completeness of surveillance reports, all hospitals had a high completeness (>80%). For the timeliness, all hospitals had a high score, this is to be appreciated and to continue.

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

Completeness				Timeliness			
Hospital catchment	W01	W02	W03	Hospital catchment	W01	W02	W03
Nyagatare	100	100	100	Nyagatare	93	93	100
Gatunda	100	100	100	Gatunda	100	100	100
Ngarama	100	100	100	Ngarama	100	100	100
Kiziguro	100	100	100	Kiziguro	100	100	100
Gahini	100	100	100	Gahini	100	100	100
Rwinkwavu	100	100	100	Rwinkwavu	100	88	100
Kibungo	100	100	100	Kibungo	94	100	100
Kirehe	100	100	100	Kirehe	100	100	100
Rwamagana	94	94	100	Rwamagana	83	100	100
Nyamata	100	88	100	Nyamata	100	100	100
Kinihira	100	100	100	Kinihira	100	89	89
Rutongo	100	100	100	Rutongo	100	100	87
Gatonde	100	100	100	Gatonde	100	100	100
Butaro	100	100	100	Butaro	100	95	95
Ruli	100	100	100	Ruli	100	100	100
Nemba	100	100	100	Nemba	100	100	100
Ruhengeri	100	100	100	Ruhengeri	94	94	100
Byumba	100	100	100	Byumba	100	100	100
CHUB	100	100	100	CHUB	100	100	100
Kabutare	100	100	100	Kabutare	95	100	95
Kabgayi	100	100	100	Kabgayi	100	100	92
Kibilizi	100	100	100	Kibilizi	100	91	100
Gakoma	100	100	100	Gakoma	83	100	100
Gitwe	100	100	100	Gitwe	100	100	89
Ruhango	100	100	100	Ruhango	100	88	100
Remera Rukoma	100	100	100	Remera Rukoma	100	100	100
Nyanza	100	95	95	Nyanza	95	95	100
Kigeme	100	100	100	Kigeme	100	100	100
Kaduha	100	100	100	Kaduha	100	90	100
Munini	100	100	100	Munini	100	100	100
Bushenge	100	100	100	Bushenge	100	100	88
Kibogora	100	100	100	Kibogora	100	100	100
Kibuye	100	100	100	Kibuye	100	100	100
Kirinda	100	100	100	Kirinda	100	100	100
Mugonero	100	100	100	Mugonero	100	100	100
Shyira	88	100	100	Shyira	88	100	100
Muhororo	100	100	100	Muhororo	100	100	90
Kabaya	100	100	100	Kabaya	100	100	86
Gihundwe	100	100	100	Gihundwe	100	100	100
Mibilizi	100	100	100	Mibilizi	100	100	100
Gisenyi	100	100	100	Gisenyi	94	100	100
Murunda	95	100	100	Murunda	95	100	100
CHUK	100	100	100	CHUK	100	0	100
Nyarugenge	89	100	100	Nyarugenge	89	89	89
Muhima	100	100	100	Muhima	100	100	100
RMH	0	100	100	RMH	0	100	100
Masaka	92	100	100	Masaka	92	100	100
Kigababaga	95	100	100	Kigababaga	80	95	100
Kacyiru	100	100	100	Kacyiru	100	0	100
KFH	0	100	100	KFH	0	100	100
Caraes Ndera	100	100	100	Caraes Ndera	0	100	100
Nyabikenke	100	100	100	Nyabikenke	100	100	100
Rwanda	99	99	100	Rwanda	97	98	98