



# WEEKLY EPIDEMIOLOGICAL BULLETIN

## WEEK 06 – 2024

(05–11 February 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 06/2024

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

- During the Epidemiological Week 06, three human deaths were notified through the electronic Community Event Based Surveillance System (eCEBS)

#### Alerts identified through the Epidemic Intelligence from Open Source (EIOS): five alerts:

- DRC: more than 1,000 cases of Monkeypox reported since the start of the year.
- Strange disease kills five children in Bukomansimbi.
- Gabon - Diphtheria outbreak 2024
- Nigeria: Lassa Fever
- Measles outbreak in Mauritania

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

- 119 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, Bacterial meningitis, snake bite and chicken pox.
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for Epi Week 06 revealed that severe pneumonia surpassed the epidemic threshold
- A total of 87 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 06

Suspected diphtheria outbreak at Muhanga district

#### Completeness and timeliness

In Epi Week 06, the overall completeness and timeliness of surveillance data reporting in Rwanda was 98% and 95% respectively.

## WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 06

**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 06, three human deaths were notified from community through eCBS:

- 1 from Burera District / Runyenyeri village
- 1 from Gatsibo District / Rugarama Village
- 1 from Ruhango District / Rurembo Village

### MEDIA SCAN

Five alerts from EIOS were detected:

- DRC: more than 1,000 cases of Monkeypox reported since the start of the year.  
<https://flutrackers.com/forum/forum/africa-ac/monkeypox/984668-drc-mpox-monkeypox-outbreak-2024#post985607>
- Strange disease kills five children in Bukomansimbi.  
<https://www.monitor.co.ug/uganda/news/national/strange-disease-kills-five-children-in-bukomansimbi-4520362>
- Gabon - Diphtheria outbreak 2024  
<https://flutrackers.com/forum/forum/africa/africa-all-other-diseases/985580-gabon-diphtheria-outbreak-2024#post985580>
- Nigeria: Lassa Fever  
<https://flutrackers.com/forum/forum/emerging-diseases-other-health-threats-alphabetical-i-thru-z/lassa-fever/984488-nigeria-2024-lassa-fever#post985579>
- Measles outbreak in Mauritania  
<https://flutrackers.com/forum/forum/emerging-diseases-other-health-threats-alphabetical-a-thru-h/childhood-diseases/measles/984063-mauritania-measles-outbreak-2024#post985578>

## 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 06

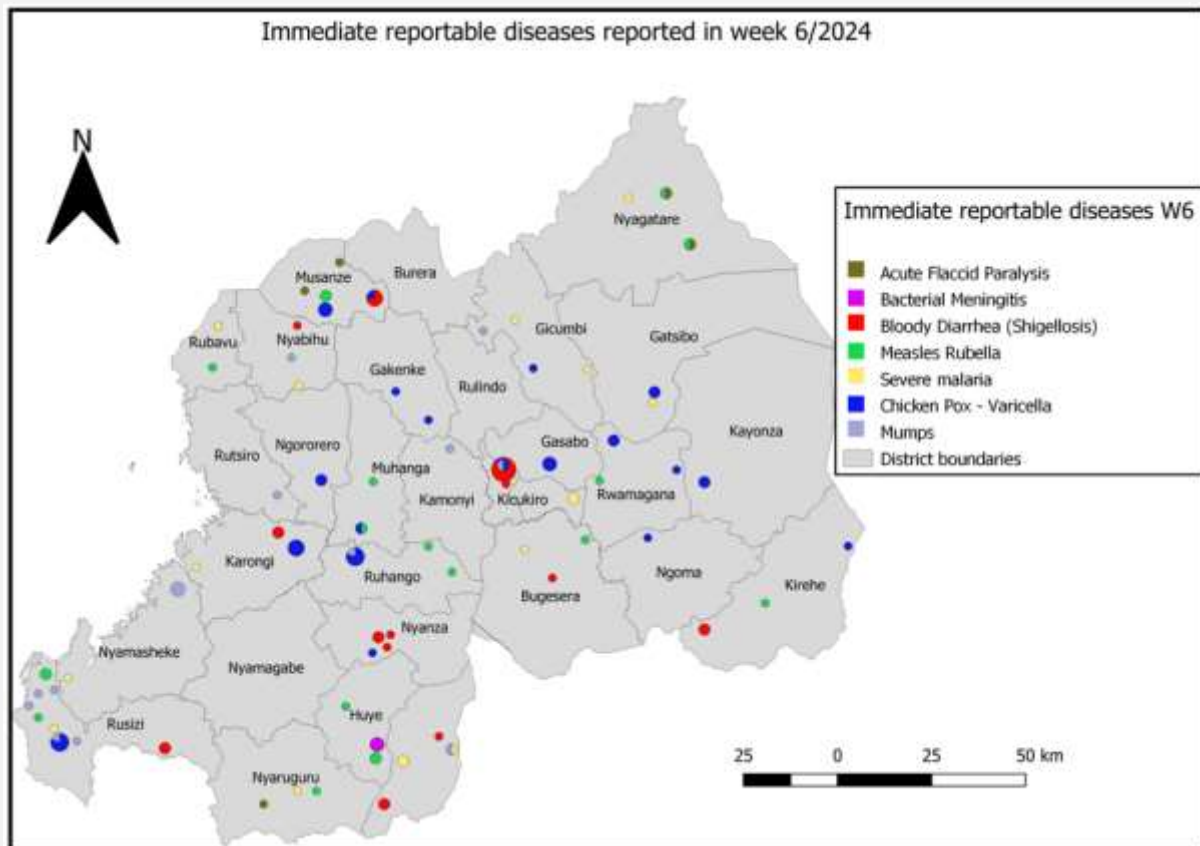
During this Epi week, 119 cases of immediate reportable diseases were notified:

- 22 cases of chicken pox were reported by 15 HFs. No HF crossed the threshold.
- 16 cases of mumps were reported by 11 HCs. No HF crossed the threshold
- 18 suspected cases of bloody diarrhea (Shigellosis) were reported by 8 health facilities. The samples were taken and sent NRL.
- 20 suspected cases of Measles/Rubella were reported by 17 HCs. The samples were taken and sent to NRL.
- 16 cases of severe malaria were reported by 12 health facilities
- 16 cases of acute flaccid paralysis were reported by 11 health facilities, the samples were taken and sent to NRL for transportation to UVRI laboratory.
- 1 case of suspected Bacterial meningitis from CHUB, the sample was tested negative.
- 10 snake bite cases reported by 10 health facilities

#### Notes:

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

## Geographical distribution of cases:



Distribution of immediate reportable diseases in Epi week 06

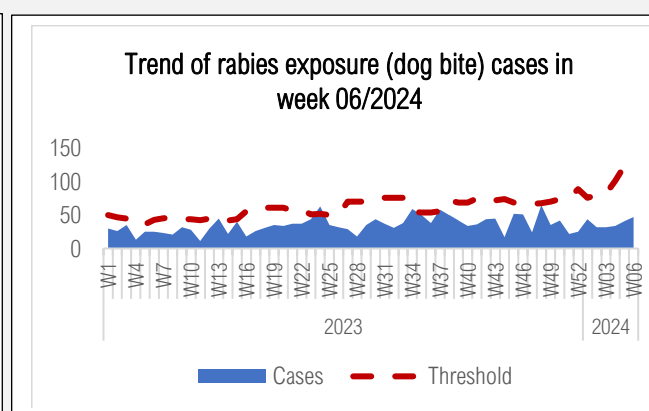
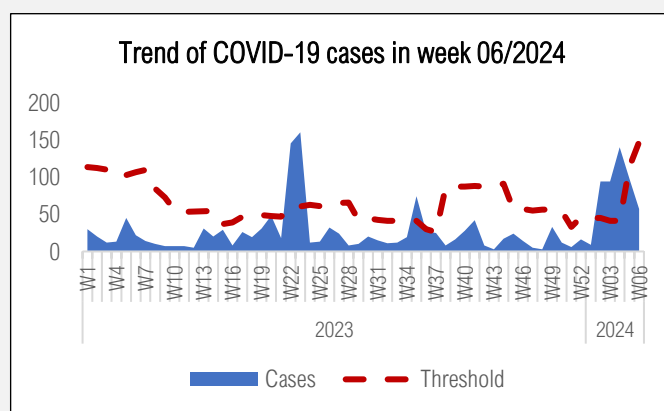
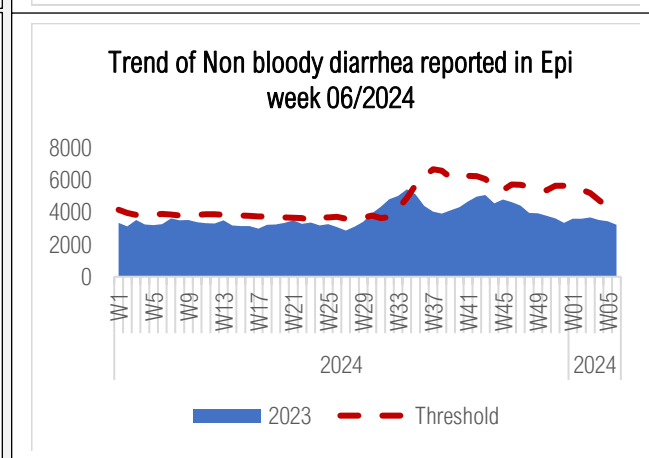
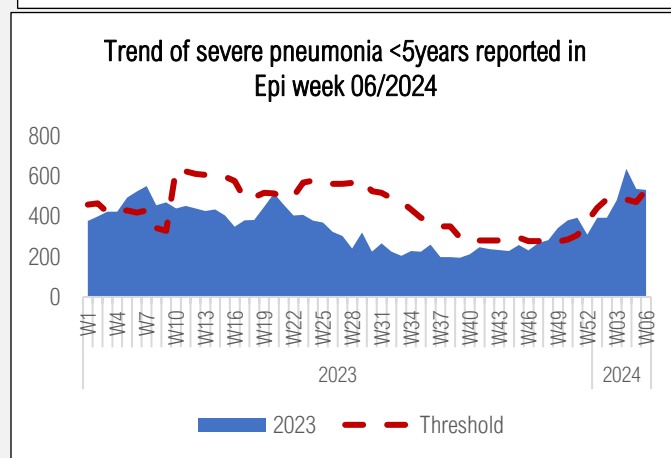
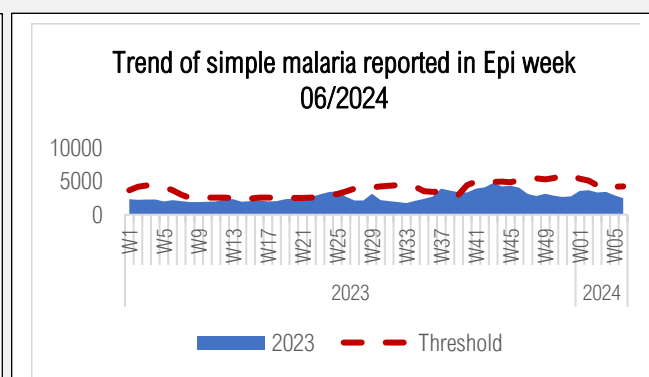
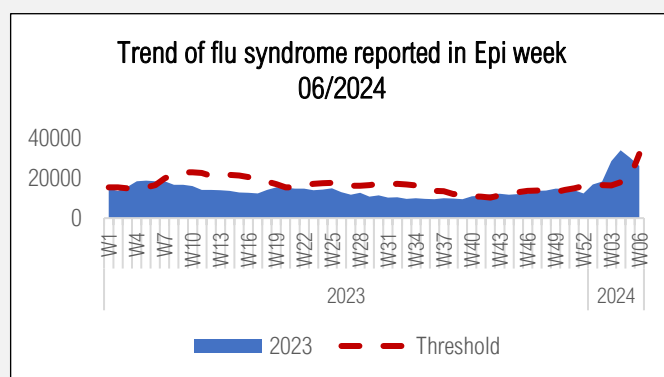
### B. WEEKLY REPORTABLE DISEASES – EPI WEEK 06

**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 6, 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 severe pneumonia cases crossed the epidemic thresholds in one or more health facility located in the following hospital: Byumba, Gatonde, Gatunda, Gihundwe, Kabaya, Kabutare, Kibagabaga, Kaduha, Kibilizi, Kibuye, Kinihira, Masaka, Mugonero, Muhima, Muhororo, Murunda, Nyabikenke, Munini, Nyagatare, Nyarugenge, Remera, Rukoma, Ruhengeri, Rutongo, Rwamagana and Rwinkwavu.

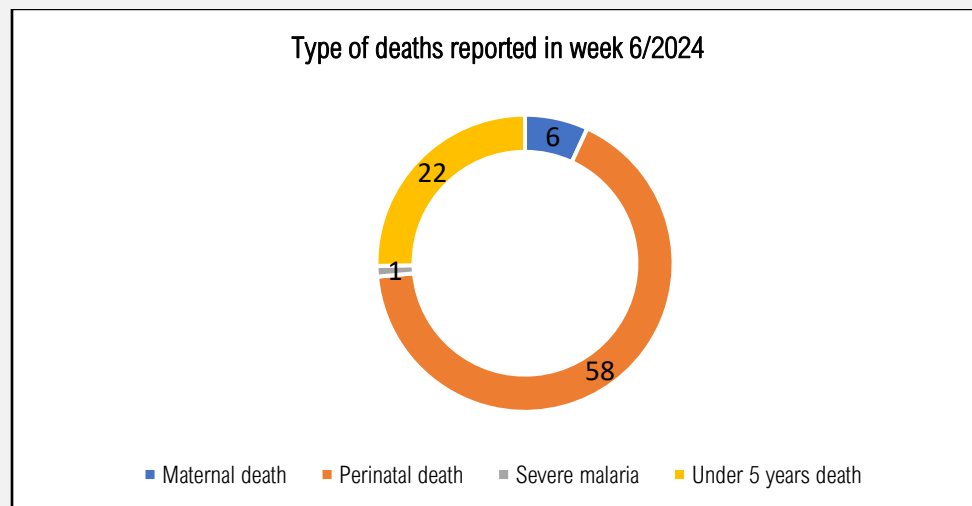
Note: The district hospitals that have the cases which surpassed the thresholds are recommended to conduct an investigation and reinforce preventive and control measures.

The figures below show the weekly reportable diseases trends:



### C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 06

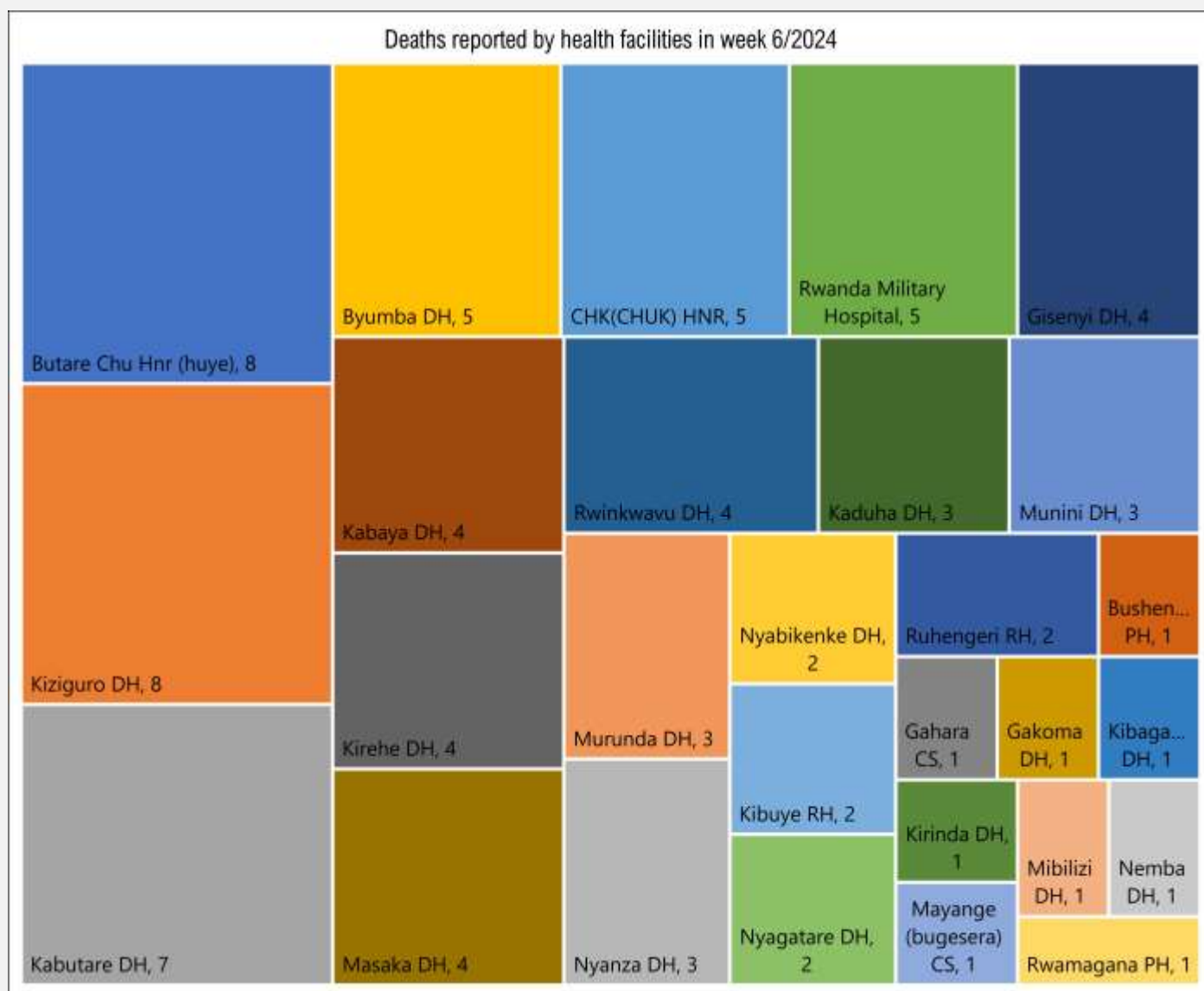
As summarized in the Pie Chart below, a total number of 87 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 58 (67%) were perinatal, 22 (25%) were deaths of children under 5 years old (including 3 deaths due to severe pneumonia), 1 (1%) death due to severe malaria, and 6 (7%) maternal deaths.



*Cause of deaths declared in epi week 06*

87 deaths were reported from various catchment areas as follow:

- 8 deaths were reported respectively by CHUB (6 perinatal deaths and 2 maternal deaths) and Kiziguro DH (7 perinatal deaths and 1 under 5 years death)
- 7 deaths were reported by Kabutare DH; all were perinatal deaths
- 5 deaths reported by respectively by Byumba DH (all were perinatal deaths); CHUK (1 perinatal death, 3 under 5 years deaths and 1 maternal death); Rwanda Military Hospital (3 under 5 years deaths and 2 maternal deaths)
- 5 deaths were reported respectively by Byumba DH (4 perinatal deaths, 1 under 5 years death), Nyagatare DH (all were perinatal deaths)
- 4 deaths were reported respectively by Gisenyi DH (3 perinatal deaths, 1 under 5 years death); Kirehe DH (4 perinatal deaths), Kabaya DH (1 perinatal death, 2 under 5 years deaths and 1 maternal death); Masaka DH (all 4 deaths were perinatal); Rwinkwavu DH (3 perinatal death, 1 under 5 years death)
- 3 deaths were reported respectively by Kaduha DH (3 perinatal deaths); Munini DH (3 under 5 years deaths); Murunda DH (3 perinatal deaths) and Nyanza DH (1 perinatal death, 2 under 5 years deaths)
- 2 deaths were reported respectively by Naybikenke DH and Nyagatare DH (all were 2 under 5 years deaths); Kibuye RH and Ruhengeri RH (all were perinatal deaths),
- 1 death was reported respectively by Bushenge PH, Gahara HC (in Kirehe DH), Kirinda DH, Nemba DH, Rwamgana PH, Mayange HC (in Nyamata DH) every health facility reported 1 perinatal death; while each of the following health facilities reported 1 under 5 years death: Gakoma DH and Kibagabaga DH; Mibilizi DH reported 1 death due to severe malaria.



*Distribution of deaths by health facilities in Epi week 06*

## OUTBREAK AND EVENT UPDATES IN EPIDEMIOLOGICAL WEEK 06

### SUSPECTED DIPHTHERIA OUTBREAK AT MUHANGA DISTRICT

Confirmed cases	0	Date reported:	February 07, 2024	Risk assessment	Low
Suspected cases	1	Source:	eIDSR		
Death(s)	0	District/HFs:	Kabgayi DH		
Total cases	1	Geoscope:	Low		

#### Outbreak description:

Since 2/2/2024, a 9-year-old male has exhibited mild headache and throat pain. Symptoms have gradually persisted and progressed to include fever, difficulty swallowing, moderate saliva secretion in the mouth, and swelling of the neck. On 7/2/2024, the patient consulted Kabgayi Hospital where diphtheria was suspected,






leading to the isolation of the patient. Upon examination and sampling, mucus swabs revealed thick consistency with no total pus. No travel history was mentioned, and the patient's vaccination status is up to date. The patient has begun to ingest small oral intake as part of medication.

**Actions Taken:**

- Isolation of the patient
- Swab samples taken and sent to NRL (National Reference Laboratory)
- Administration of IV Benzathine Penicillin and Hydrocortisone
- The follow-up on results is ongoing

## eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 06

*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 06, the overall completeness and timeliness of disease surveillance data reporting in Rwanda was 98% and 95%, respectively. With regards to completeness of surveillance reports, almost all hospitals had a high completeness (>80%), except one hospital that had a low score: King Faysal Hospital. For the timeliness, many hospitals had a high timeliness (>80%), except two hospitals with a moderate timeliness score (between 60% and 79%): Gitwe and Kibagabaga DHs; and three hospitals with a low score (below 60%): Kacyiru, King Faysal hospital and CARAES Ndera.

**Notes:** The health facility that did not have a high score for the completeness and 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 figures below.

Completeness							Timeliness						
Hospital catchment	W01	W02	W03	W04	W05	W06	Hospital catchment	W01	W02	W03	W04	W05	W06
Nyagatare	100	100	100	100	100	100	Nyagatare	93	93	100	100	100	93
Gatunda	100	100	100	100	100	100	Gatunda	100	100	100	100	100	100
Ngarama	100	100	100	100	100	100	Ngarama	100	100	100	100	100	100
Kiziguro	100	100	100	100	100	100	Kiziguro	100	100	100	100	92	100
Gahini	100	100	100	100	100	100	Gahini	100	100	100	100	100	100
Rwinkwavu	100	100	100	100	100	100	Rwinkwavu	100	88	100	100	88	100
Kibungo	100	100	100	100	100	100	Kibungo	94	100	100	100	100	100
Kirehe	100	100	100	100	100	100	Kirehe	100	100	100	100	90	100
Rwamagana	94	94	100	100	94	94	Rwamagana	83	100	100	94	89	83
Nyamata	100	88	100	100	94	94	Nyamata	100	100	100	88	94	94
Kinihira	100	100	100	100	100	100	Kinihira	100	89	89	100	100	100
Rutongo	100	100	100	100	100	100	Rutongo	100	100	87	100	100	100
Gatonde	100	100	100	100	100	100	Gatonde	100	100	100	100	100	100
Butaro	100	100	100	100	100	100	Butaro	100	95	95	100	90	100
Ruli	100	100	100	100	100	100	Ruli	100	100	100	100	100	100
Nemba	100	100	100	100	100	100	Nemba	100	100	100	100	100	90
Ruhengeri	100	100	100	94	89	89	Ruhengeri	94	94	100	94	89	89
Byumba	100	100	100	100	100	100	Byumba	100	100	100	100	100	100
CHUB	100	100	100	100	100	100	CHUB	100	100	100	100	100	100
Kabutare	100	100	100	100	95	100	Kabutare	95	100	95	100	95	100
Kabgayi	100	100	100	100	100	100	Kabgayi	100	100	92	100	100	100
Kibilizi	100	100	100	100	100	100	Kibilizi	100	91	100	100	91	100
Gakoma	100	100	100	100	100	100	Gakoma	83	100	100	100	83	100
Gitwe	100	100	100	100	100	100	Gitwe	100	100	89	100	78	78
Ruhango	100	100	100	100	100	100	Ruhango	100	88	100	100	100	100
Remera Rukoma	100	100	100	100	100	100	Remera Rukoma	100	100	100	93	93	93
Nyanza	100	95	95	95	100	100	Nyanza	95	95	100	100	89	95
Kigeme	100	100	100	100	100	100	Kigeme	100	100	100	100	100	100
Kaduha	100	100	100	100	100	100	Kaduha	100	90	100	100	100	100
Munini	100	100	100	100	100	100	Munini	100	100	100	100	100	88
Bushenge	100	100	100	100	88	100	Bushenge	100	100	88	100	88	100
Kibogora	100	100	100	100	100	100	Kibogora	100	100	100	93	100	100
Kibuye	100	100	100	100	100	100	Kibuye	100	100	100	100	100	92
Kirinda	100	100	100	100	100	100	Kirinda	100	100	100	100	100	83
Mugonero	100	100	100	100	100	100	Mugonero	100	100	100	100	86	100
Shyira	88	100	100	100	88	100	Shyira	88	100	100	100	88	100
Muhororo	100	100	100	100	100	100	Muhororo	100	100	90	100	100	100
Kabaya	100	100	100	100	100	100	Kabaya	100	100	86	100	100	86
Gihundwe	100	100	100	100	80	100	Gihundwe	100	100	100	100	70	100
Mibilizi	100	100	100	100	100	100	Mibilizi	100	100	100	100	100	100
Gisenyi	100	100	100	100	100	88	Gisenyi	94	100	100	94	100	88
Murunda	95	100	100	100	100	95	Murunda	95	100	100	100	100	95
CHUK	100	100	100	100	100	100	CHUK	100	0	100	100	100	100
Nyarugenge	89	100	100	100	100	100	Nyarugenge	89	89	89	100	100	100
Muhima	100	100	100	100	100	100	Muhima	100	100	100	100	100	100
RMH	0	100	100	100	100	100	RMH	0	100	100	100	0	100
Masaka	92	100	100	100	100	100	Masaka	92	100	100	100	100	100
Kigababaga	95	100	100	90	95	90	Kigababaga	80	95	100	85	100	70
Kacyiru	100	100	100	0	100	100	Kacyiru	100	0	100	0	0	0
KFH	0	100	100	100	100	0	KFH	0	100	100	100	0	0
Caraes Ndera	100	100	100	0	0	100	Caraes Ndera	0	100	100	0	0	0
Nyabikenke	100	100	100	100	100	100	Nyabikenke	100	100	100	100	100	100
Rwanda	99	99	100	99	98	98	Rwanda	97	98	98	98	95	95