



# WEEKLY EPIDEMIOLOGICAL BULLETIN

## WEEK 25 – 2023

(19– 25 June 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 25

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

- During the epidemiological week 25, two alerts were notified through the electronic Community Event Based Surveillance System (eCBS): 2 human deaths occurred in Rusizi and Nyagatare districts.
- Alerts received through Epidemic Intelligence from Open Source (EIOS): 1 alert: Cholera death toll in SA rises to 43.

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

- 275 immediate reportable diseases were notified by health facilities countrywide. They included cases of acute flaccid paralysis (AFP), mumps, severe malaria; bloody diarrhea, measles/rubella, bacterial meningitis, cholera and chicken pox.
- 8 weekly reportable diseases and health events that 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, are being reported on a weekly basis. A thorough analysis conducted for Epi Week 25 revealed that, cases of simple malaria increased and crossed the epidemic thresholds.
- A total of 51 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 outbreaks

In Epi Week 25, there was three outbreaks in Rwanda, identified in Kirehe, Rubavu and Ngoma districts:

- Ongoing Measles outbreak in Kirehe District
- Cholera in Rubavu district
- Food poisoning in Ngoma district

#### Completeness and timeliness

In Epi Week 25, the overall completeness and timeliness of reporting in Rwanda was 98% and 97%, respectively.

## WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS)

### EPIDEMIOLOGICAL WEEK 25

**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 EVENT BASED SURVEILLANCE

During the Epi week 25, two alerts were received from community:

### 2 Human Deaths:

- A 2-days-old, Male from Mirama village, Kinyaga cell, Nkanka sector, Rusizi District passed away on 23/06/2023. The cause of death is unknown.
- A 1 year & 6 months-old, Female from Rutete village, Gataba cell, Kiyonde sector, Nyagatare District passed away on 22/06/2023. The child presented fever and passed away before attending the health facility.

## MEDIA SCAN

During the Epi week 25, one alert was received through Epidemic Intelligence from Open Source (EIOS):

### Cholera death toll in SA rises to 43.

In South Africa, the Department of Health confirmed on Sunday that the number of cholera-related deaths has now risen to 43 since the outbreak. According to the department, South Africa has recorded 1 045 suspected cases of cholera in 15 out of 52 districts across five provinces, 197 of which were laboratory-confirmed.

Gauteng remains the hardest-hit province at 89%, with 176 cases reported in three districts.

The department said the focus has been on preventing further person-to-person transmission of the disease, which has contributed to detecting laboratory-confirmed infections in most areas, especially where there is no reported cholera outbreak.

They are appealing to the public to maintain strict compliance with personal hygiene, especially during food preparation at social gatherings and funerals.

<https://reliefweb.int/report/south-africa/cholera-death-toll-sa-rises-43>

## WEEKLY UPDATES ON INDICATOR BASED SURVEILLANCE (IBS) EPIDEMIOLOGICAL WEEK 25

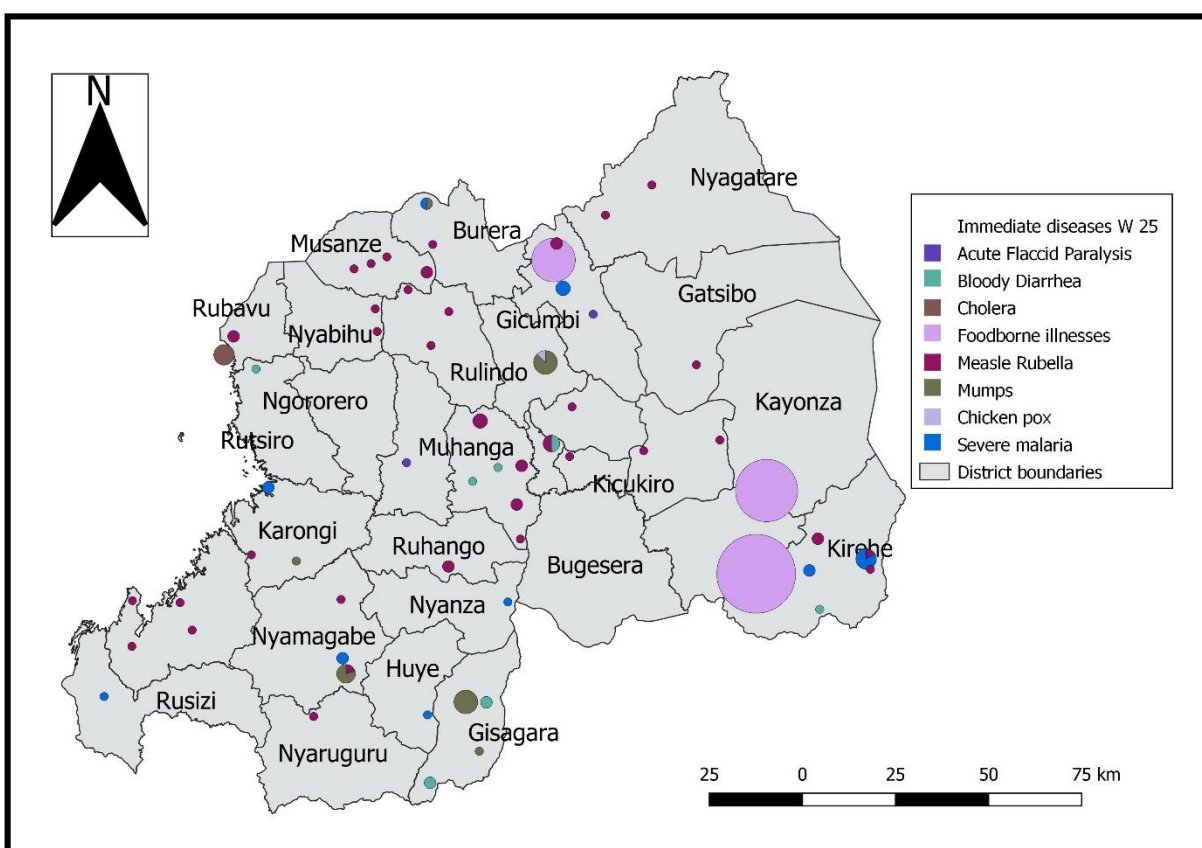
**Description:** *Rwanda has been implemented Indicator Based Surveillance according to the IDSR 3rd guidelines where approximately 45 priority diseases, health conditions and public health events are being monitored and reported from health facilities countrywide on a regular basis. Diseases that are 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 25

During the Epi week 25; 275 cases of immediate reportable diseases were notified, including 170 cases of foodborne illness 46 suspect cases of measles/rubella, 18 confirmed cases of severe malaria, 10 suspected cases of bloody diarrhea, 2 suspected cases of acute flaccid paralysis, 22 cases of mumps, 1 case of chicken pox, 2 confirmed and 4 suspected cases of cholera. (See figure below).

**Notes:** For the diseases requiring laboratory confirmation, the samples were collected and sent to the National Reference Laboratory for testing, except for some diseases whose samples were not sent, including bloody

diarrhea: among 10 cases, only 2 sample had been sent to NRL. Regarding the treatment, malaria confirmed cases and suspected cases for the remaining diseases had been managed at the health facility level. The health facilities are recommended to collect the sample and send them to NRL for confirmation as required.



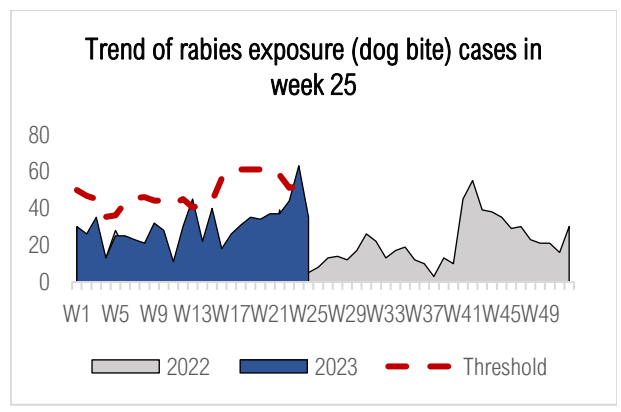
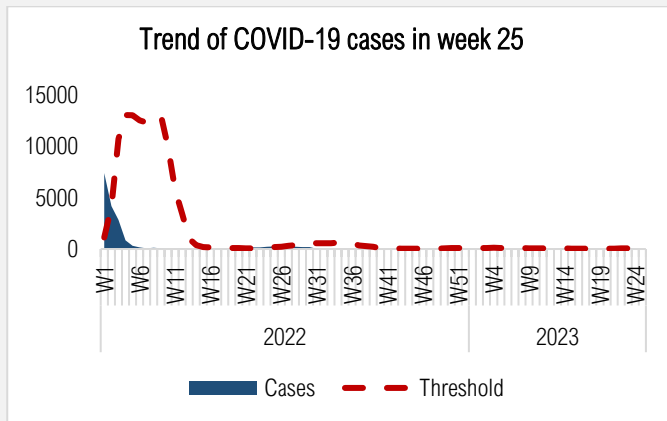
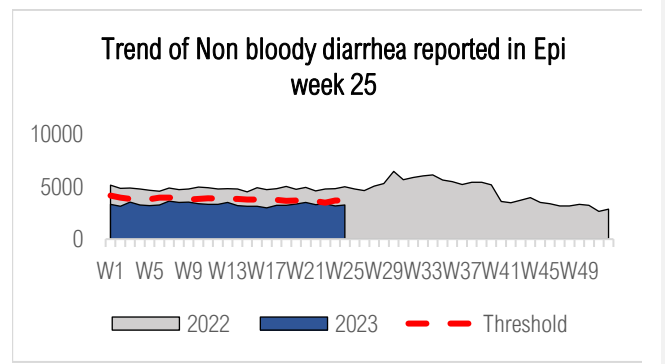
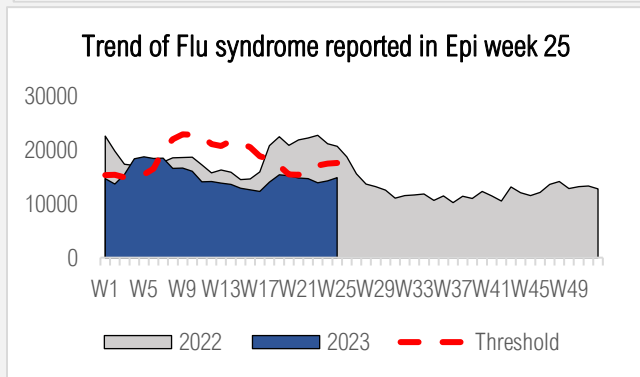
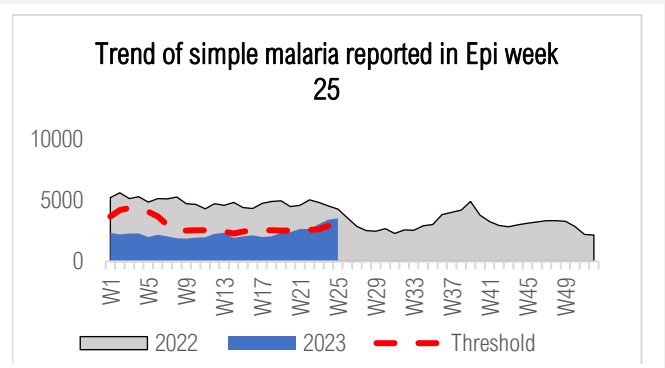
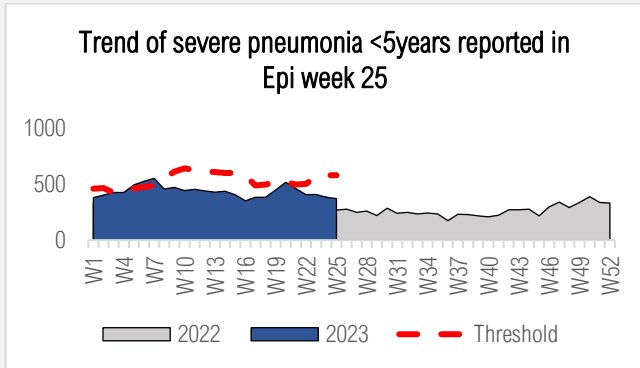
*Distribution of immediate reportable diseases in Epi week 25*

## WEEKLY REPORTABLE DISEASES – EPI WEEK 25

**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.

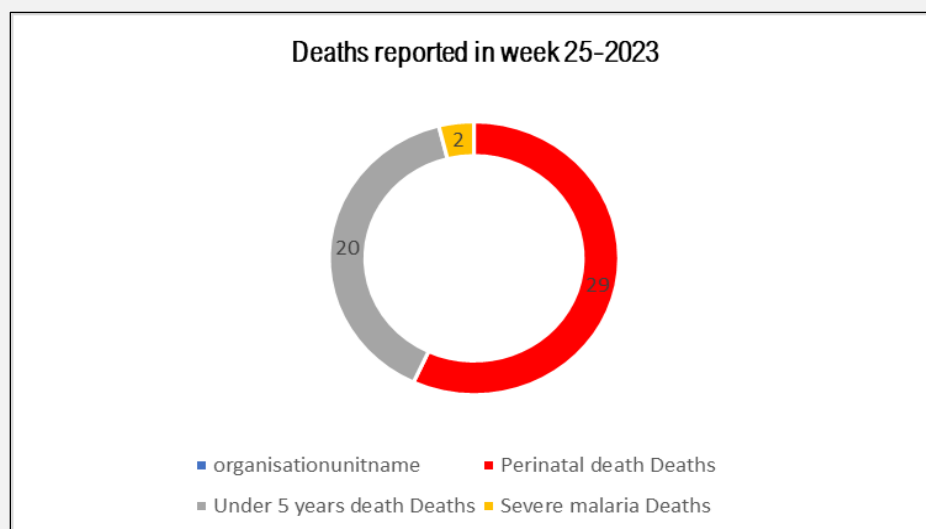
In Epi Week 25, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to the epidemic thresholds. The results of the analysis revealed that among weekly reportable diseases, simple malaria, crossed the epidemic thresholds. For simple malaria cases crossed the thresholds in 11 hospitals, among others: Gitwe DH, Kabgayi DH, Kibilizi DH, Kabgayi DH, Kibungo DH, Kigeme DH, Kirinda DH, Munini DH, Nyagatare DH, Ruhango DH and Kirehe DH.

Kirehe DH was the most affected, as the number of Simple malaria cases increased about 5 times the threshold (442 cases versus the threshold of 89). This indicates that deep investigations are needed to orient response actions.



## B. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 25

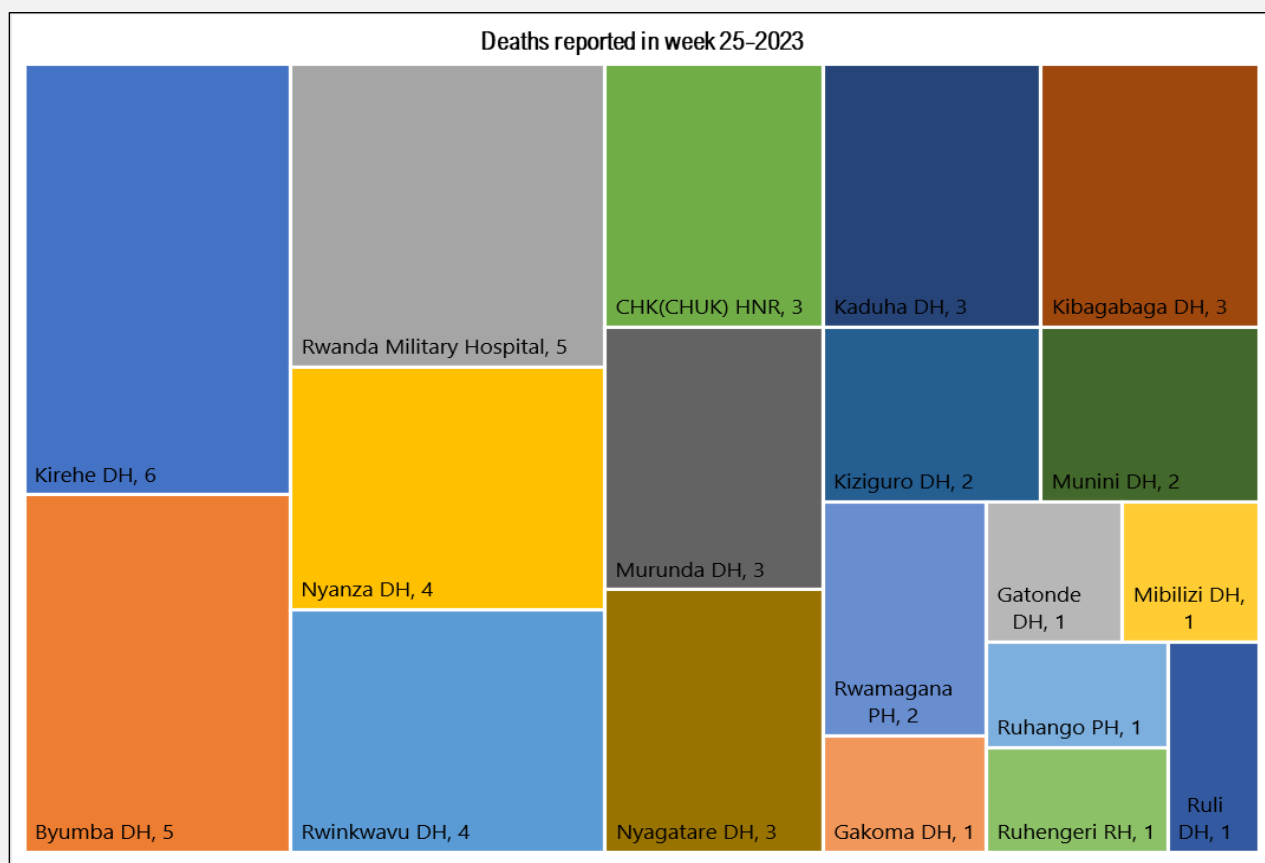
In Epi week 25, as summarized in the Pie Chart below, a total number of 51 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 29 (59%) were classified as perinatal, 20(39%) are deaths of children under 5 years old, 2(4%) are deaths due to severe malaria.



### *Cause of deaths declared in epi week 25*

Deaths were reported from various catchment areas as follow:

- 6 deaths were reported in Kirehe DH
- 5 deaths were reported respectively in Byumba DH and Rwanda military hospital.
- 4 deaths were reported respectively in Rwinkwavu DH and Nyanza DH
- 3 deaths were reported respectively in CHUK, Kaduha DH, Kibagabaga DH, Murunda DH and Nyagatare DH
- 2 deaths were reported respectively in Kiziguro DH, Munini DH and Rwamagana PH
- 1 death was reported respectively in Gatonde DH, Gakoma DH, Mibirizi DH, Ruli DH, Ruhango PH and Ruhengeri RH (See figure below).



## OUTBREAK AND EVENT UPDATES EPIDEMIOLOGICAL WEEK 25

### 1. MEASLES OUTBREAK

Confirmed cases	17	Date reported:	February 27, 2023	Risk assessment	Low
Epi link cases	57	Source:	NRL, eIDSR		
Death(s)	0	District/HFs:	Kirehe/Mahama Refugee Camp		
Total cases	74	Geoscope:	Low		

**Outbreak description:** The measles outbreak is still ongoing in Kirehe district since 27<sup>th</sup> February 2023. During Epi Week 25; no additional confirmed case found in Mahama Refugee camp by laboratory confirmation, the total laboratory confirmed cases remained 17 and 57 cases confirmed by epidemiological link. However, 1 suspect case was identified in the previous week, and sample was taken and sent to NRL.

**Ongoing interventions**

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

## 2. FOOD POISONING IN NGOMA DISTRICT

Confirmed cases	0	Date reported:	June 25, 2023	Risk assessment	Low
Suspected cases	187	Source:	eIDSR		
Death(s)	0	District/HFs:	Ngoma/Gituku HC & Kibungo RH		
Total cases	187	Geoscope:	Low		

### Outbreak description:

On 25th June 2023, Gituku HC and Kibungo RH received patients presenting fever, abdominal pain, vomiting, and diarrhea after attending a wedding ceremony held on 24th June 2023 in Ngoma district, Rukira sector, Kibatsi cell, Akagarama village. As of now, a total of 187 cases have been recorded where 164 consulted the health facilities and 23 are in the community. The patients were treated and recovered.

Stool and blood samples have been taken as follows:

- 5 stool samples for culture by Kibungo RH,
- 3 stool samples and 3 blood samples for culture by the Rwanda forensic laboratory.
- Samples of food and beverage consumed during the ceremony have been collected for investigation by the Rwanda forensic laboratory for testing.

### Interventions:

- Community outreach for active case finding and distribution of ORS to affected individuals in the community is ongoing with Gituku HC taking the lead, and Kibungo District Hospital supporting.
- Ongoing efforts are being made to provide health education and raise awareness about the importance of seeking healthcare.

## 3. CHOLERA OUTBREAK IN RUBAVU DISTRICT

Confirmed cases	3	Date reported:	June 14, 2023	Risk assessment	Low
Suspected cases	27	Source:	eIDSR		
Death(s)	1	District/HFs:	Rubavu/ Kigufi HC,		
Total cases	30	Geoscope:	Low		



### Outbreak description:

On June 13, 2023, Kigufi health center, in Rubavu district recorded 2 suspected cases of cholera. This was followed by notification of other 2 cases on 14th and 15th June 2023, respectively. Six stool samples were taken for culture after being all tested positive by pre-culture rapid test. Of them, three were tested positive for V. Cholerae/ Inaba on June 18, 2023. Eight results are still pending.

As of 24th June, 30 cases meeting cholera case definition have been recorded with one death of a female aged of 14. Twelve cases are still hospitalized including 8 in Kigufi HC, 1 in Murara HC and 3 at Gisenyi DH. all hospitalized cases are improving.




The source of infection was the use of unsafe water and poor hygiene and sanitation.

### Interventions:

- From 21st to 25th June 2023, PHS&EPR Division in collaboration with Gisenyi DH conducted a field investigation.
- Enhance risk communication and community engagement on prevention and control measures
- Distribute chlorine tablets to the population in affected area for water purification
- Break off consumption of street food
- Assess water taps availability in the community
- Conduct active surveillance in all HFs

## eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 25

*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 25, the overall completeness and timeliness of reporting in Rwanda were 98% and 97%, respectively. With regards to completeness of surveillance reports, almost all DH had a score greater than 80%, except one hospital that had a low score (CARAES Ndera).

The overall timeliness score was 97%. Many hospitals had the score greater than 80%, but two hospitals had a low score (CARAES Ndera and RMH).

**Notes:** To achieve the effective surveillance and early detection of outbreaks, health facilities are recommended to improve their reporting indicators (timeliness and completeness). Details, on completeness and timeliness for all health facilities are showed in the figure below.

Hospital catchment area	Completeness																									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	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
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	100	100	100	100	100	100	100	100	100	100	86	79	86	94	79	94	94	86	79	93	86	93	100	
Gatunda	100	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	100	100	100	100	100	100	100	100	100	89	100	100	100	100	89	89	100	100	100	100	100	100	
Ngarara	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	88	100	100	100	100	100	100	100	100	100	100	100	100	75	100	100	100	100	100	100	100	100		
Kiziguro	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	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Gahini	100	100	100	100	100	100	89	89	78	100	100	78	100	100	100	100	100	100	78	100	100	100	100	100	100	89	100	100	100	100	100	100	100	78	100	100	100	100	100	78	78	100	100	100	100	100	89	100		
Rwinkwavu	100	100	100	100	100	100	100	100	100	100	100	88	100	88	88	100	100	100	100	100	100	100	100	100	100	100	100	88	100	100	100	100	88	88	100	63	75	100	88	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	100	94	100	100	100	100	100	100	94	100	94	100	100	100	100	100	100	100	100	94	94	100	100	100	94	94	100	100	100	100	94	100	
Kirehe	100	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	100	100	100	100	95	100	100	100	95	100	100	100	100	100	100	100	95	100		
Rwamagana	76	71	88	100	100	100	100	100	94	100	88	84	100	100	100	100	100	100	100	100	100	100	100	100	100	100	76	65	83	82	76	88	100	94	100	100	94	84	94	100	88	71	94	94	100	100	94	88	88	
Nyamata	100	94	100	94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	88	76	94	88	94	100	88	100	88	100	94	76	100	100	76	100	100	82	94	88	100	94	88
Kinihira	100	100	100	100	100	100	89	89	100	89	89	100	89	89	100	100	100	89	89	89	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	89	89	89	89	89	89	89	100	100	100	100	67	100	89	
Rutongo	93	87	93	87	100	100	100	100	100	100	93	93	100	100	100	100	100	100	100	100	100	100	100	100	100	100	93	87	93	73	100	100	100	100	93	93	100	100	100	100	100	100	100	93	93	93	100	93		
Gatonde	100	86	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	86	100	100	100	100	100	100	86	100	100	71	100	100	100	100	100	100	100	71	100			
Butaro	80	85	95	95	75	90	95	95	95	100	95	100	95	100	95	100	95	100	95	100	90	100	100	100	100	95	80	85	80	75	65	90	85	95	90	95	90	85	75	85	95	75	85	85	85	90	85	85	90	
Ruli	100	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	90	90	100	100	100	100	100	100	100	100	100	100	100	100		
Nemba	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	100	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	80	94	94	100	100	89	100	100	100	100	100	94	89	89	100	83	89	83	72	94	94	94	78	94	83	89	89	89	100	100	94	89	89	100	
Byumba	96	100	100	96	96	96	100	100	100	100	96	100	96	96	92	100	100	100	96	100	96	100	100	100	96	100	96	100	96	96	96	100	100	96	96	96	81	96	96	96	96	96	96	96	100	96	100	96	100	
CHUB	0	100	100	100	100	100	100	100	100	0	0	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	0	0	0	0	100	100	0	100	100	0	100	100	0	100			
Kabutare	84	95	100	100	95	95	95	89	95	95	100	100	89	100	100	100	100	100	100	100	100	100	100	100	100	84	89	89	95	84	89	89	88	84	95	74	100	79	100	100	83	95	95	100	100	100	84	89	95	
Kabgayi	100	100	92	85	100	92	92	92	92	100	100	92	92	85	100	100	92	100	100	100	100	100	100	100	100	100	100	92	92	85	92	77	92	85	85	100	92	92	92	69	100	100	100	100	92	100	92	92	100	
Kibilizi	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	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Gakoma	83	100	100	100	83	100	100	100	100	100	100	100	67	100	100	100	100	100	100	100	100	100	100	100	100	83	100	100	83	67	83	100	83	100	100	67	60	83	67	60	83	83	67	100	83	83	67	100	83	
Gitwe	100	100	89	100	100	78	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	89	89	89	78	100	78	100	100	89	89	100	67	100	78	44	89	89	100	89	89	100		
Ruhango	88	100	100	100	88	88	75	88	88	100	100	63	75	63	63	75	88	88	75	63	88	63	100	100	100	100	88	88	88	100	88	88	75	88	88	100	63	75	50	63	50	38	75	75	63	75	63	100	63	100
Remera	100	100	100	93	100	100	100	100	100	100	100	100	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	100	100	100	100	100	100	100	100	100	100	100		
Rukoma	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	84	84	89	79	74	100	89	84	63	89	84	74	68	47	89	85	47	89	89	89	84	95	89	95	
Nyanza	77	77	100	92	100	92	100	100	100	100	100	92	100																																					