



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 14 – 2023

(03 – 09 April 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 - WEEK 14

Event Based Surveillance (EBS) Highlights:

- During Week 14, three alerts were received through the electronic Community Event Based Surveillance System (eCBS), including one case of dog bite and two community deaths.
- One alert was also received from Epidemic Intelligence from Open Source (EIOS), reporting an outbreak of highly pathogenic H5N1 bird flu in Senegal.

Indicator Based Surveillance (IBS) Highlights:

- 97 alerts for immediate reportable diseases were received from health facilities countrywide, including cases of food poisoning, measles, bloody diarrhea, acute flaccid paralysis (AFP), cholera, and dog bites.
- 8 diseases are being reported on a weekly basis, and a thorough analysis conducted for Week 14 revealed that all weekly reportable diseases were below the threshold, indicating that there were no outbreaks of these diseases during that week. The eight diseases are 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 total of 50 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 week 14, there were two reported outbreaks in Rwanda.
- The first was a food poisoning outbreak in Kayanza district, where 80 people developed symptoms after consuming food and drinks at a gathering. 29 people were confirmed to have food poisoning, but there were no deaths reported.
- The second outbreak was a measles outbreak in Rubavu and Kirehe districts, with a total of 3 new cases and 65 cumulative cases reported.

Completeness and timeliness

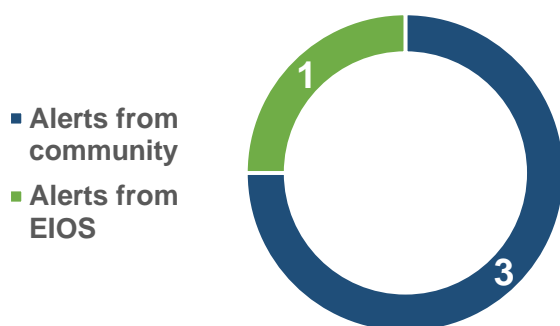
- In Week 14, the overall completeness and timeliness of reporting in Rwanda were 94% and 78%, respectively.

WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS)

Week 14

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 for a rapid response to prevent or control the spread of diseases. RBC has taken the initiative to implement 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.

Source of alerts received in week 14



Alerts description

Source	Alert	# of alerts
eCEBS*	Dog bite	1
	Death	2
EIOS*	Senegal reports H5N1 Bird Flu Outbreak	1

*eCEBS: electronic Community Event Based Surveillance

*EIOS: Epidemic Intelligence from Open Source

- ◆ During Week 14, we only received 3 alerts from eCBS that are described below:

1-Dog bite

- A 41-year-old male from Gicumbi District, Nyamiyaga Sector, Janda Cell, Kamabuye village was bitten by a dog on 07/04/2023. As intervention, he was brought to the Ruvune HC for further management and was transferred to Byumba DH for anti-rabic vaccines.

2-community human deaths

- A 1-year-old female from Gatsibo District, Rugarama Sector, Matare Cell, Kabana Village passed away in the community on April 06, 2023. However, she had no known illness or any other known cause of death.
- A 2-year-old male , from Gatsibo District, Rugarama Sector, Matare Cell, Kabana Village passed away in the community on April 09, 2023. Reason of death, he fell in the pond.
-

- ◆ We have also received 1 alert from EIOS within this week 14:
 - Senegal's Livestock Ministry has reported an outbreak of the highly pathogenic H5N1 bird flu on a poultry farm in the village of Potou near the northwestern town of Louga
<https://www.urdupoint.com/en/miscellaneous/senegal-reports-h5n1-bird-flu-outbreak-1669400.html>

WEEKLY UPDATES ON INDICATOR BASED SURVEILLANCE (IBS) Week 14

Rwanda has been implemented Indicator Based Surveillance through IDSR 3rd guideline where approximately **45 priority diseases** are being monitored where Health facilities are reporting on a regular basis either immediate or weekly. Diseases that are prone to outbreaks are being reported immediately while diseases that are considered as endemic are reported on a weekly basis.

A. IMMEDIATE REPORTABLE DISEASES IN WEEK 14

During Week 14, we received 97 alerts for immediate reportable diseases from Health Facilities countrywide. 31 alert cases of foodborne illness, 15 alert suspect cases of measles, 5 alert cases of bloody diarrhea, 2 alert cases of AFP, 1 alert suspect case of Cholera.

In the 14th week, 41 cases of mumps were reported, as well as 1 suspected case of Chickenpox. These were cases unreported during previous weeks due to the fact that Mumps and Chickenpox were no longer being monitored under the 3rd edition of the IDSR. However, with the identification of numerous cases, the RBC team has requested that health facilities report these cases in the system to allow for further follow-up.

Note: Diseases requiring laboratory confirmation, samples were taken and sent to National Reference Laboratory for testing and meanwhile suspected cases are managed at the health facility level.

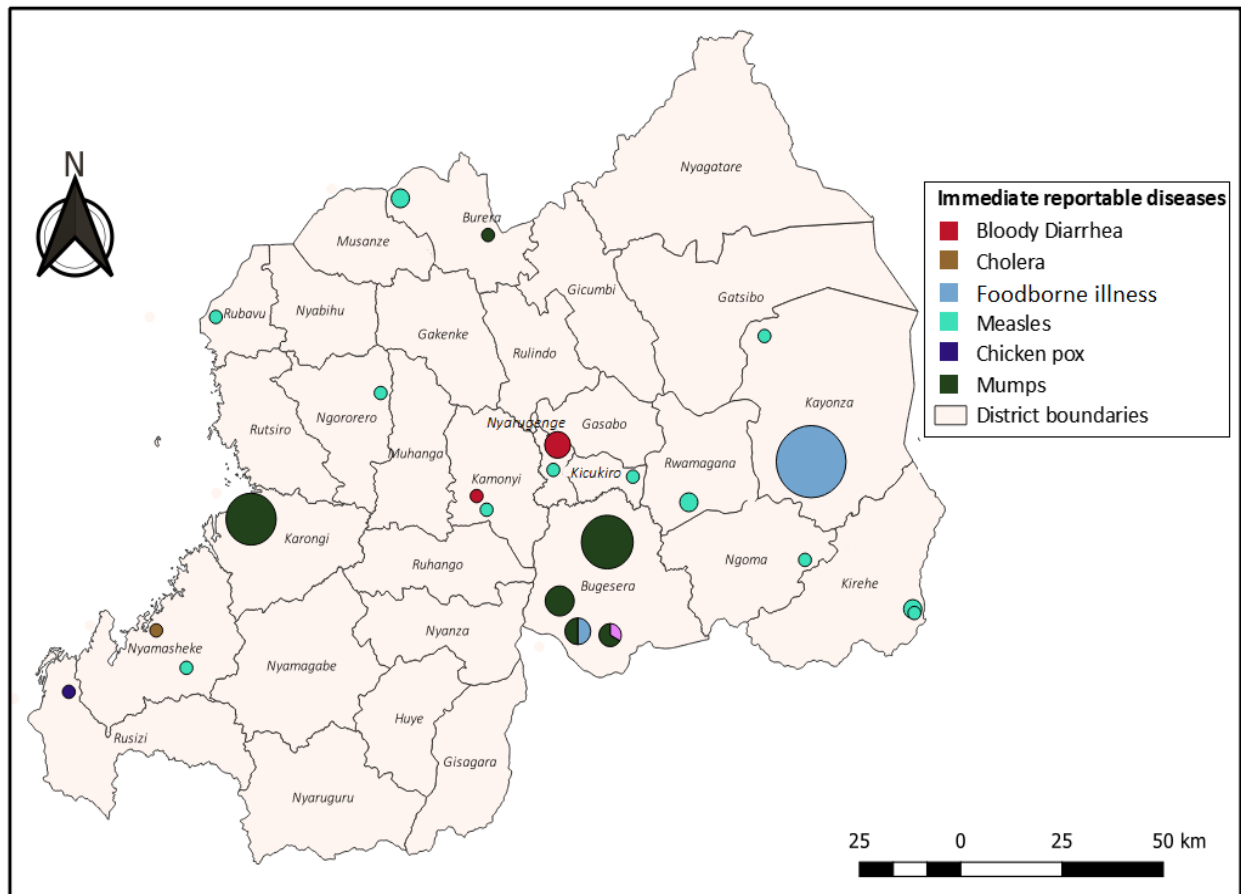
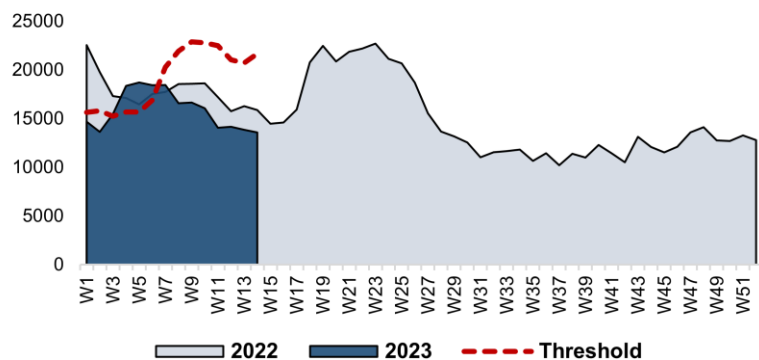


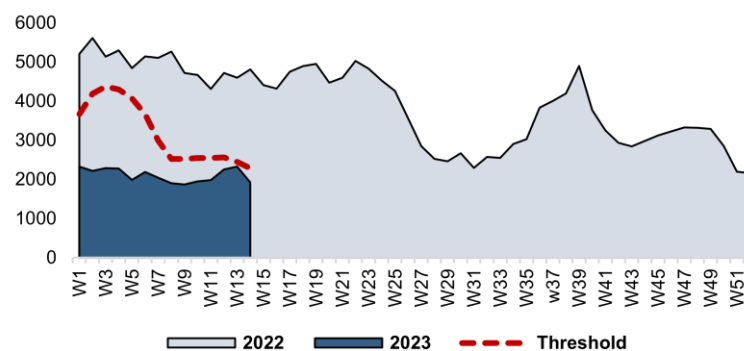
Figure: Distribution of immediate reportable diseases in Week 14

B. WEEKLY REPORTABLE DISEASES IN WEEK 14

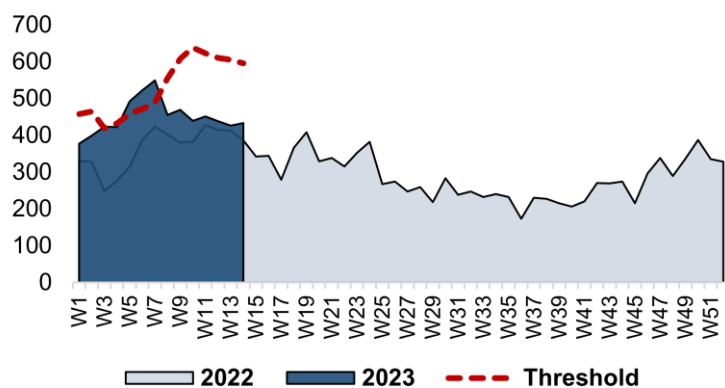
Trend of Flu syndrome reported in week 14/2023



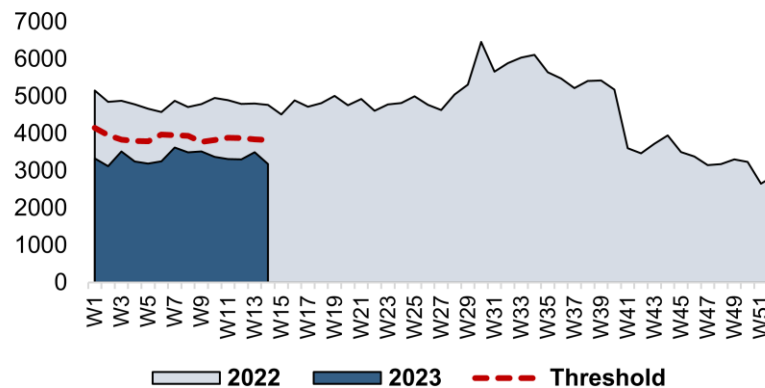
Trend of simple malaria reported in week 14/2023

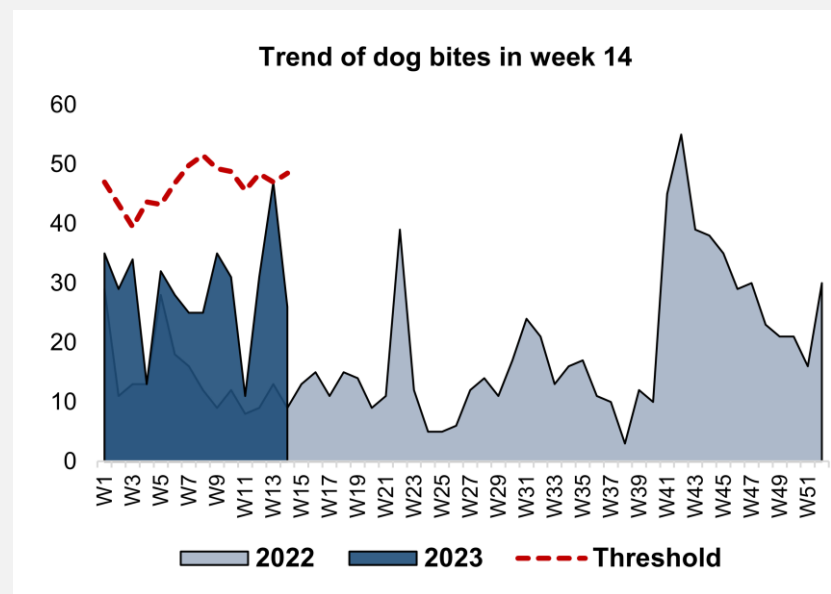
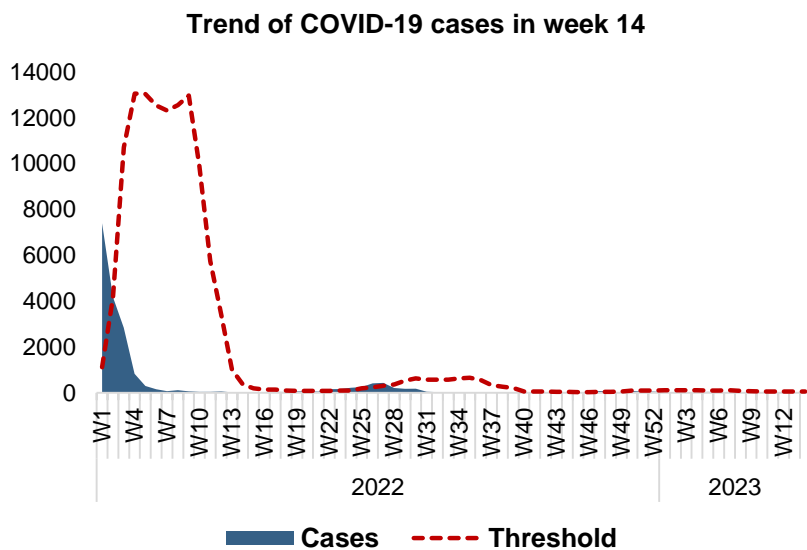


Trend of severe pneumonia <5yrs reported in week 14/2023



Trend of Non bloody diarrhea reported in week 14/2023





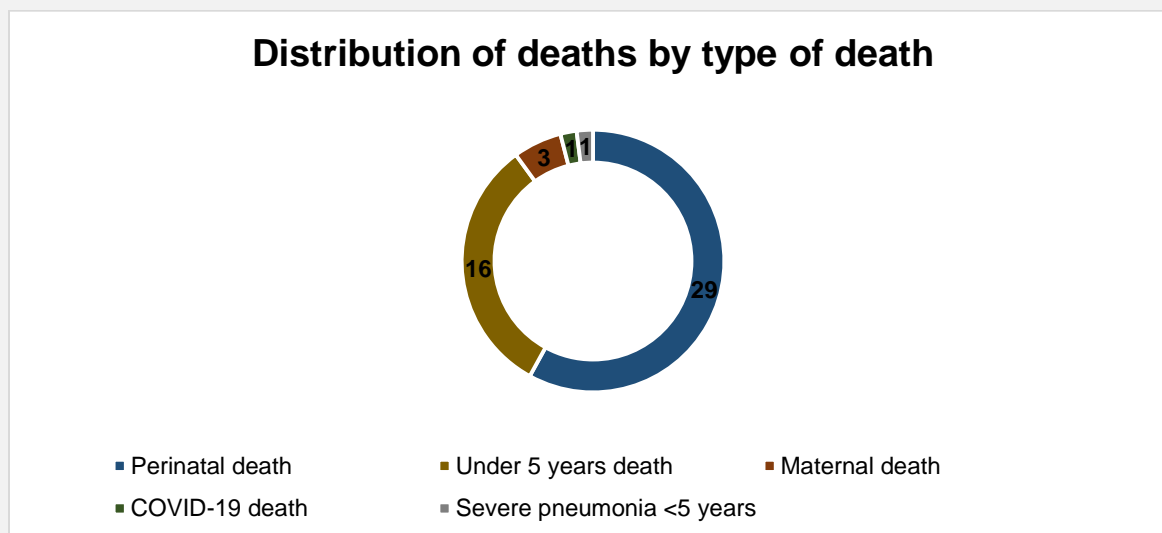
Description

Weekly reporting provides data for monitoring trends of diseases or conditions to early detect outbreaks. In Rwanda, after the adaptation of the 3rd edition of IDSR, eight diseases are being reported 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.

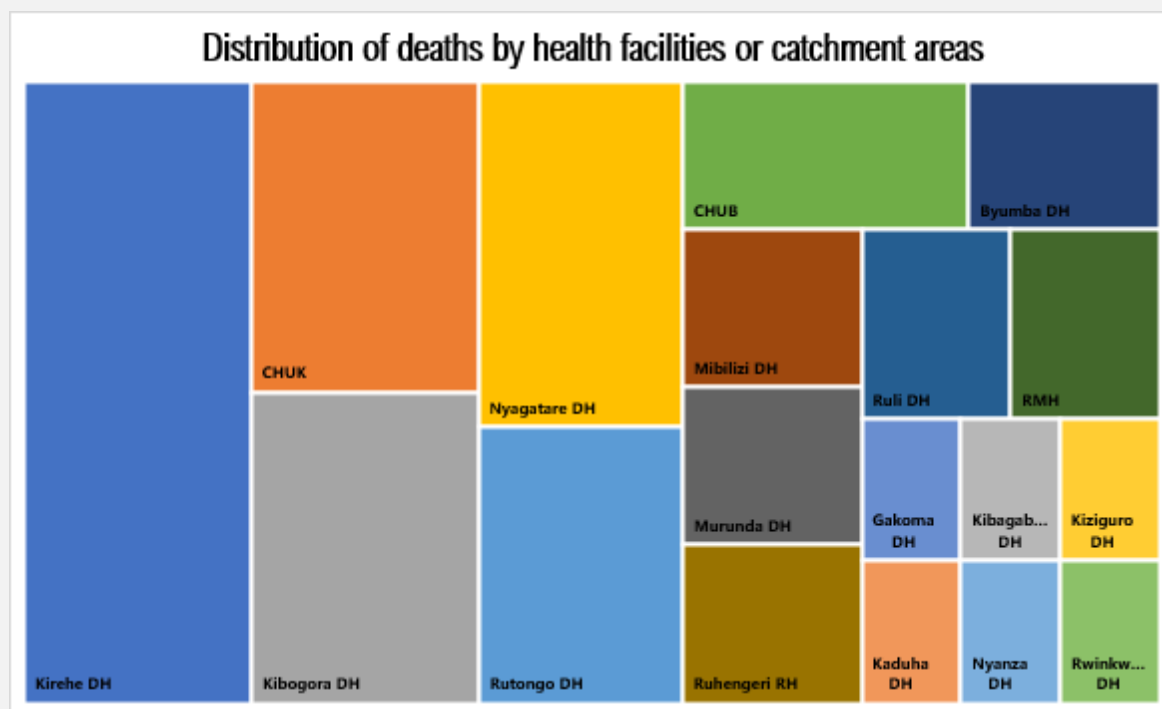
In Week 14, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to the established threshold. The results of the analysis revealed that all weekly reportable diseases were below the threshold. This indicates that there were no outbreaks of these diseases during that week.

C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – WEEK 14

In week 14, as summarized in the chart below, a total of 50 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 29 were classified as perinatal, 16 were deaths of children under the age of 5, 3 were maternal deaths, 1 was attributed to COVID-19, and 1 was due to severe pneumonia in a child under 5 years old.



The deaths were reported from various catchment areas as follow: 10 deaths reported in Kirehe DH, 5 deaths reported in CHUK and Kibogora DH, 4 deaths reported in Rutongo DH, 3 deaths reported in CHUB. Two deaths were reported in Byumba DH, Mibilizi DH, Murunda DH, Ruhengeri RH, and Ruli DH. Additionally, one death was reported in Gakoma DH, Kaduha DH, Kibagabaga DH, Kiziguro DH, Nyanza DH, and Rwinkwavu DH. (See figure below)



ONGOING OUTBREAK – WEEK 14

1. FOODBORNE ILLNESS OUTBREAK

Confirmed cases:	29	Date reported:	April 03, 2023	Risk assessment	Low
Suspect cases:	51	Source:	Karama HC		
Death(s):	0	District:	Kayonza		
Total cases:	80	Geoscope:	Low		

Event description

On April 2, 2023, in Kayonza district, Murama Sector, Murama Cell, Akajevuba Village; 102 people consumed food and drinks as part of a gathering. The following day, 80 people among them developed symptoms of vomiting, diarrhea, and abdominal pain. Only 29 people consulted Karama HC. One was referred to Rwinkwavu DH. Currently all were treated and recovered.

2. MEASLES OUTBREAK

Confirmed cases	16	Date reported:	Week 14	Risk assessment	Low
Epi link cases	49 (3 new)	Source:	NRL, eIDSR		
Death(s)	0	District:	Rubavu, Kirehe		
Total cases	65	Geoscope:	Low		

Event description

In the Rubavu district, there were no new laboratory confirmed measles cases reported in the week 14, leaving the total number of confirmed cases at 8, with an additional 15 cases confirmed by epidemiological link. On the other hand, in the Kirehe district, 3 new cases were identified in the Mahama Refugee camp through epidemiological link during the same period. This brings the total number of laboratory confirmed cases in the district to 8, with an additional 34 cases confirmed by epidemiological link. Notably, none of the newly identified cases had received measles vaccination.

Ongoing interventions

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



eIDSR REPORTS COMPLETENESS & TIMELINESS

In Rwanda, eIDSR reports completeness and timeliness are scored as follow: **Greater or equal to 80%: High**, **Between 60% and 79%: Moderate** and **less than 60%: Low**.

In Week 14, the overall completeness and timeliness of reporting in Rwanda were 94% and 78%, respectively. With regards to report completeness, Ruhango DH had a moderate score of 63%, while CHUB failed to report altogether.

As for timeliness, 13 catchment areas, including Nyagatare DH, Rwinkwavu DH, Nyamata DH, Butaro DH, Nemba DH, Kabutare DH, Kabgayi DH, Gitwe DH, Kaduha DH, Kabaya DH, Muhororo DH, Kibagabaga DH, and Nyabikenke DH, scored moderate. However, 8 catchment areas, namely CHUB, Gakoma DH, Ruhango PH, Nyanza DH, Kigeme DH, RMH, Kacyiru DH, and KFH, scored poorly.

Note: It is important to note that health facilities are recommended to improve their reporting by providing complete reports on time in order to achieve effective surveillance and early detection of outbreaks. Details, on completeness and timeliness for all health facilities is enclosed in the figure below.

Health Facility	W01	W02	W03	W04	W05	W06	W07	W08	W09	W10	W11	W12	W13	W14
Nyagatare	100	100	100	100	100	86	93	93	100	93	100	100	86	93
Gatunda	100	100	100	100	100	100	100	100	100	78	100	100	89	100
Ngarama	88	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	100	92
Gahini	100	100	100	100	100	100	89	89	78	100	100	78	100	100
Rwinkwavu	100	100	100	100	100	100	100	100	100	100	100	88	100	88
Kibungo	94	100	94	100	100	100	100	100	100	100	100	100	100	94
Kirehe	100	100	100	100	100	100	100	100	100	90	100	100	100	100
Rwamagana	76	71	88	100	100	94	100	100	94	100	88	94	100	100
Nyamata	100	94	100	94	100	100	100	100	100	100	100	100	100	100
Kininihira	100	100	100	100	100	100	89	89	100	89	89	100	100	89
Rutongo	93	87	93	87	100	100	100	100	100	93	93	100	100	100
Gatonde	100	86	100	100	100	100	100	100	100	86	100	100	100	100
Butaro	80	85	95	95	75	90	95	95	95	100	95	100	95	100
Ruli	100	100	100	100	100	100	100	100	100	100	90	90	100	100
Nemba	100	100	100	100	100	89	100	100	100	89	100	100	100	89
Ruhengeri	94	94	94	100	83	89	89	89	100	94	94	83	94	89
Byumba	96	100	100	96	96	96	100	100	100	96	100	96	96	92
CHUB	0	100	100	100	100	100	100	100	0	0	100	100	100	0
Kabutare	84	95	100	100	95	95	95	95	89	95	95	100	100	89
Kabgayi	100	100	92	85	100	92	92	92	92	100	100	92	92	85
Kibilizi	100	100	100	100	100	100	100	100	100	100	100	82	91	100
Gakoma	83	100	100	100	83	100	100	100	83	100	100	100	67	100
Gitwe	100	100	89	100	100	78	100	100	100	100	100	100	100	89
Ruhango	88	100	100	100	88	88	75	88	88	100	100	63	75	63
Remera Rukoma	100	100	100	93	100	100	100	100	100	100	100	100	93	100
Nyanza	84	84	89	79	95	100	89	89	74	95	100	79	79	89
Kigeme	77	77	100	92	100	92	100	100	100	100	92	100	92	85
Kaduha	100	90	100	100	100	100	100	100	100	100	100	100	90	100
Munini	100	94	100	100	100	94	100	100	100	100	100	100	100	100
Bushenge	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Kibogora	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
Kirinda	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
Shyira	100	100	100	100	100	88	100	100	100	100	100	100	94	94
Muhororo	100	100	100	100	100	100	100	100	100	100	100	100	100	90
Kabaya	86	100	100	100	100	100	100	100	86	100	100	100	100	100
Gihundwe	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mibilizi	100	100	100	100	100	100	100	100	100	100	100	100	92	100
Gisenyi	100	100	100	100	100	100	100	100	100	94	100	100	100	100
Murunda	89	100	100	100	100	95	100	100	100	100	100	100	95	95
CHUK	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nyarugenge	100	100	89	100	100	100	100	100	100	100	100	100	100	100
Muhima	100	100	100	100	100	100	100	100	100	75	100	100	100	100
RMH	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Masaka	100	100	100	92	100	100	100	100	100	100	100	100	100	100
Kigababaga	90	86	95	95	90	95	100	100	90	100	100	100	95	95
Kacyiru	0	100	100	100	100	100	100	100	100	100	100	100	100	100
KFH	0	0	100	100	100	100	100	100	0	100	100	100	100	100
Caraes Ndera	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Yabikenke	80	80	80	60	80	80	80	80	100	100	100	100	100	100
Rwanda	90	95	98	98	98	97	98	98	94	95	99	97	96	94

	W01	W02
	100	100
	100	100
	88	100
	100	100
	100	100
	100	88
	94	100
	100	100
	76	65
	100	88
	100	100
	93	87
	100	86
	80	85
	100	100
	100	100
	94	89
	96	100
	0	100
	84	89
	100	92
	100	100
	83	100
	100	100
	88	88
	94	84
	77	69
	100	90
	100	100
	100	100
	100	100
	100	100
	100	100
	100	100
	100	100
	86	100
	100	100
	100	100
	100	100
	89	100
	100	100
	100	100
	100	100
	100	100
	90	81
	0	100
	0	0
	80	80
	90	94

TIMES NEWS													
W01	W02	W03	W04	W05	W06	W07	W08	W09	W10	W11	W12	W13	W14
100	100	100	100	100	86	93	93	93	93	100	100	86	79
100	100	100	100	100	100	100	100	100	78	89	100	89	100
89	100	100	100	100	100	88	100	100	100	100	100	100	100
100	100	100	100	100	100	100	100	100	100	100	100	100	92
100	100	100	100	100	89	89	89	78	100	100	78	100	100
100	88	100	100	100	100	100	100	100	88	88	88	100	63
94	100	94	100	100	100	100	100	100	100	100	100	100	94
100	100	100	100	95	95	100	100	100	90	95	100	100	94
76	65	53	82	76	88	100	100	94	100	100	94	94	94
100	88	76	94	88	94	94	100	88	100	88	100	94	76
100	100	100	100	89	100	89	67	100	89	78	89	100	89
93	87	93	73	100	100	100	100	100	93	93	100	93	100
100	86	100	100	100	100	100	100	100	86	100	100	86	100
80	85	80	75	65	90	85	95	90	95	90	90	85	75
100	100	100	100	100	100	90	100	100	100	90	90	100	100
100	100	89	100	100	89	100	100	100	89	78	100	100	78
94	89	89	100	83	89	83	72	94	94	94	78	94	83
96	100	96	96	88	96	100	100	100	96	96	96	96	81
0	100	100	100	100	100	100	0	0	0	0	100	100	0
84	89	89	95	84	89	89	89	84	95	74	100	100	79
100	92	92	85	92	77	92	85	85	100	92	92	92	69
100	100	100	100	100	100	82	100	100	100	100	82	91	82
83	100	100	100	83	67	83	100	83	100	100	100	67	50
100	100	89	89	89	78	100	78	100	100	89	89	100	67
88	88	88	100	88	88	75	88	88	88	100	63	75	50
100	100	100	93	100	100	100	100	100	100	93	100	93	94
84	84	89	79	74	100	89	84	63	89	84	74	68	47
77	69	92	92	100	92	100	92	100	100	92	100	92	46
100	90	90	100	100	100	100	100	90	100	100	90	90	80
100	94	100	100	100	94	94	100	100	94	88	94	100	82
100	100	100	100	100	100	100	100	100	100	100	100	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	83
100	100	100	100	86	100	100	100	100	100	86	100	100	86
100	100	100	100	100	88	100	100	100	100	100	100	94	88
100	100	90	100	100	100	100	90	100	100	100	100	100	80
86	100	100	86	100	100	71	100	71	100	100	100	100	71
100	100	90	100	80	100	90	90	90	100	100	100	100	90
100	100	100	100	100	100	100	100	83	100	100	100	92	100
100	100	94	100	100	100	100	100	100	94	94	100	100	100
89	100	95	100	100	95	100	95	100	95	95	100	84	95
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100	100	100	100	100	100	100	89	100	100	100	100	100	100
100	100	100	100	100	100	100	100	100	75	100	100	100	100
100	100	0	100	100	0	100	100	100	100	100	100	100	0
100	100	100	92	100	92	100	100	100	92	100	100	92	92
90	81	100	90	90	95	90	100	86	100	90	90	95	76
0	100	100	100	100	100	100	100	100	100	0	0	100	0
0	0	100	100	100	100	0	100	0	100	100	100	100	0
80	80	80	60	80	80	80	80	100	100	100	100	100	100
90	94	93	96	95	94	93	94	92	94	91	94	95	78