



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 36 – 2023

(04-10 September 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 36

Event Based Surveillance (EBS) Highlights:

- During the epidemiological week 36, four alerts were notified through the electronic Community Event Based Surveillance System (eCBS), there were 4 human deaths.
- Two alerts were identified through the Epidemic Intelligence from Open Source (EIOS):
 - Africa battling 125 disease outbreaks, says WHO
 - South Africa's Measles Outbreak Reignites in Gauteng Province

Indicator Based Surveillance (IBS) Highlights:

- 356 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, bacterial meningitis and chicken pox,
- 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 36 revealed that no disease crossed the epidemic threshold.
- A total of 52 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 updates in week 36

Ongoing outbreak:

Foodborne illness outbreaks in Rwamagana district, Munyiginya sector, Bwana cell, Rwamugurisu Village

Completeness and timeliness

In Epi Week 36, 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 36

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 36, four alerts were received from community:

4 alerts of Human deaths:

- 2 alerts from Ngororero District
- 1 alert from Karongi District
- 1 alert from Nyagatare district

MEDIA SCAN

During the Epi week 36, two alerts were received through Epidemic Intelligence from Open Source (EIOS):

○ **Africa battling 125 disease outbreaks, says WHO**

The Senior Adviser of the World Health Organisation Global Joint External Evaluation Secretariat, Dr Hendrick Ormel, said there were 125 disease outbreaks currently in the WHO African region. He listed the diseases to include Covid-19, cholera, yellow fever, mpox, measles, wild poliovirus and circulating vaccine-derived poliovirus. Ormel also said 20 human-made and natural disasters, including cyclones, drought, conflicts, floods and civil unrest were currently on in Africa.

The countries in the WHO African region are Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cape Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Cote d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea and Guinea-Bissau. Others are Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, South Africa, South Sudan, Togo, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

However, Nigeria is battling multiple disease outbreaks like Covid-19, measles, mpox, yellow fever, Lassa fever, meningitis, cholera, diphtheria, and anthrax, among others. Speaking with our correspondent, Ormel stated that poverty and increased interaction between animals and humans were some of the reasons for the multiple outbreaks. <https://punchng.com/africa-battling-125-disease-outbreaks-says-who/>

○ **South Africa's Measles Outbreak Reignites in Gauteng Province**

The Republic of South Africa's year-long battle against measles outbreaks continues in September 2023. In the past weeks (week 34 up until week 35), 17 laboratory-confirmed measles cases were detected across the country from four of the eight provinces. As of September 2, 2023, Gauteng province reported most of the cases (11), Limpopo reported three, Kwa-Zulu Natal reported two, and North West reported one case. Measles is highly contagious. Around 90% of people who are not protected will become infected following exposure to the virus.

The National Institute for Communicable Diseases (NICD) criteria for declaring the measles outbreak was met in the Northern Cape province in week 15, the North West province in week 24, and the Free State province in week 25. Since late 2022, the NICD has tested 6,816 serum samples for measles, of which 1160 (17%) were confirmed positive. The NICD has implemented numerous vaccination programs throughout the measles outbreaks and continue in September 2023. According to the U.S. Centers for Disease Control and Prevention (CDC), India leads all other countries over the past year with about 57,000 cases. In addition, the CDC published a global Travel Health Notice on June 29, 2023, highlighting various measles outbreaks.

<https://www.vaxbeforetravel.com/2023/09/10/south-africas-measles-outbreak-reignites-gauteng-province>

WEEKLY UPDATES ON INDICATOR BASED SURVEILLANCE (IBS) EPIDEMIOLOGICAL WEEK 36

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 36

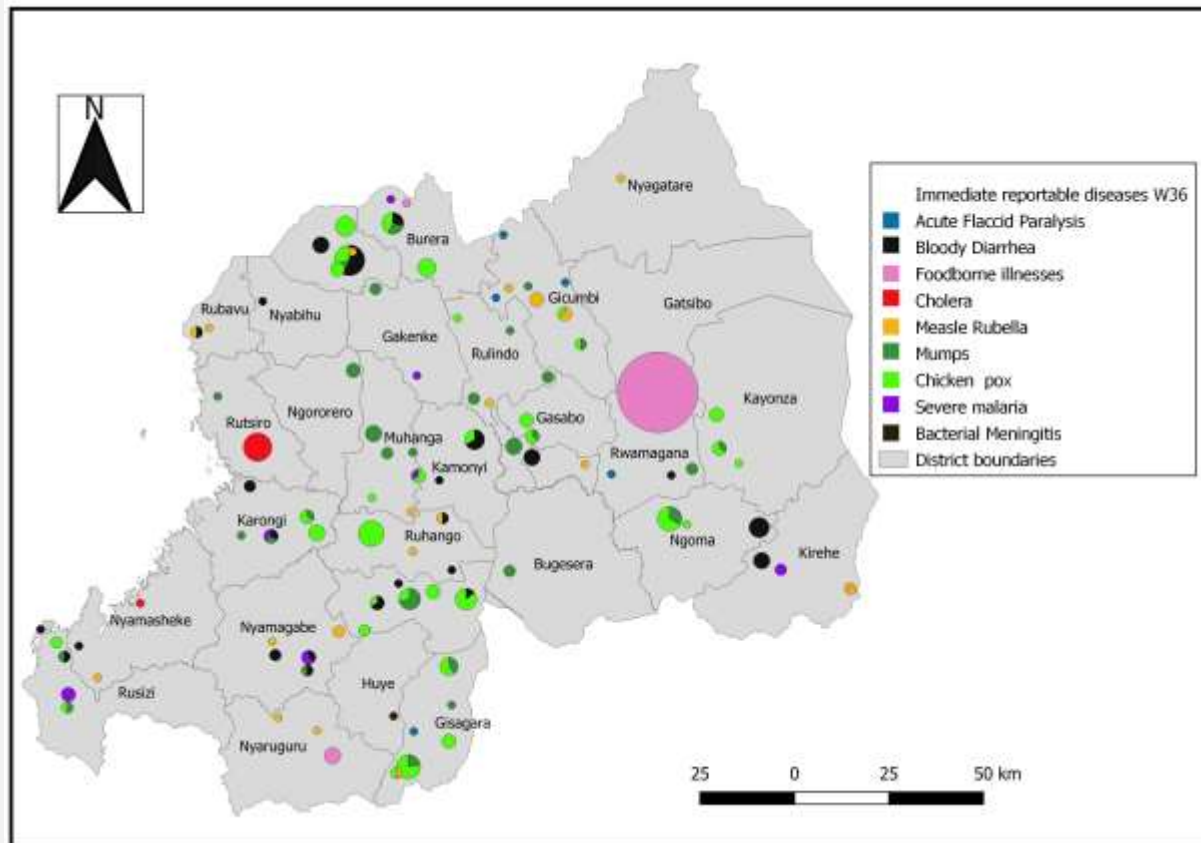
During Epi week 36; 356 cases of immediate reportable diseases were notified. They included:

- 94 cases of chicken pox were reported by 32 health facilities, included 1 HC that crossed the threshold: Muyunzwe HC that reported respectively 10 cases.
- 53 cases of mumps reported by 29 HCs, no HC crossed the threshold.
- 101 cases of foodborne illness were reported by 2 health facilities, included 4 cases of foodborne illness from Coko (Ruli)HC, occurred during the week 34, then reported with the delay, 79 cases were reported in Munyiginya HC, all 79 cases described below were reported in IDSR and this HC crossed the threshold.
- 54 suspected cases of bloody diarrhea reported by 24 HCs
- 25 suspected cases of Measles/Rubella were reported by 20 health centers, and the laboratory results were pending.
- 11 confirmed cases of severe malaria reported by 7 health facilities and they crossed the alert threshold: Kigeme DH, Kirehe DH, Kibilizi DH, Cyanika (Burera)HC, Musango HC, Kivumu HC (Muhanga) and Nyange (Ruli) HC.
- 5 suspected cases of acute flaccid paralysis reported by 5 health facilities that crossed alert threshold: Kibilizi DH, Nyakaliro HC, Miyove HC, Bwisige HC, and Rubaya (Gicumbi) HC.
- 13 cases of cholera confirmed by RDT were reported and crossed the alert thresholds. 12 cases from Iwawa HC and 1 in Kibogora DH. The culture results from those samples were negative, then the cases were taken as probable cases, the persons were treated and cured.
- 1 suspected case of bacterial meningitis reported by CHUB, the sample was not taken.

Notes:

- For the diseases whose cases crossed the thresholds are recommended to conduct the investigation

- requiring laboratory confirmation, the samples were collected and sent to the National Reference Laboratory for testing, but for bacterial meningitis, the sample has to be taken for confirmation next time.
 - All confirmed cases and suspected cases had been managed at health facility level.
- (See the distribution of cases by place in the map below)

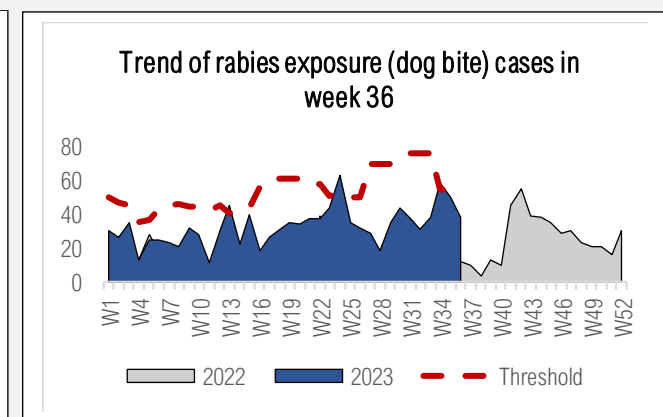
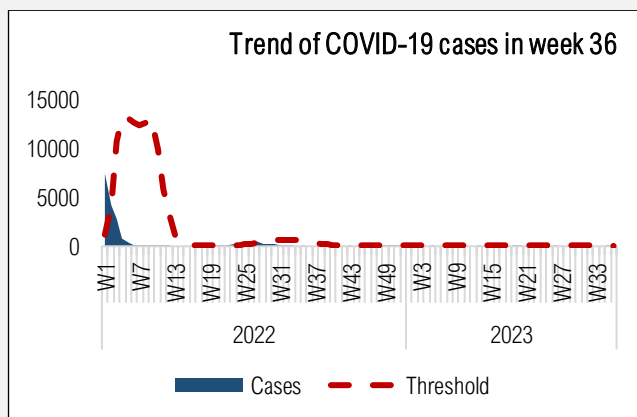
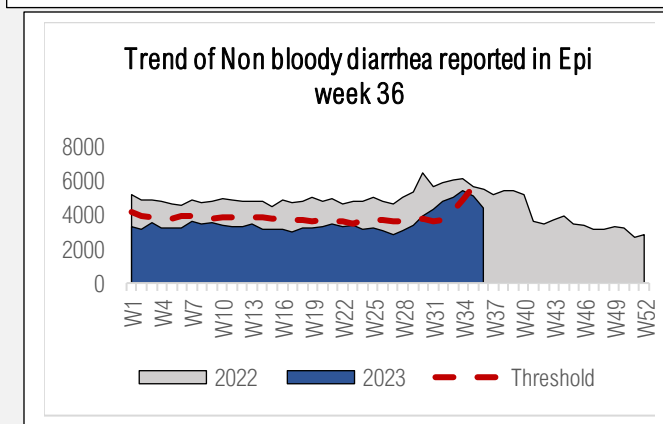
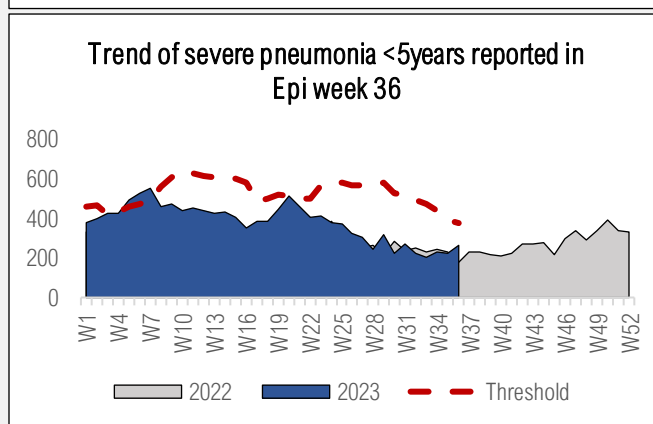
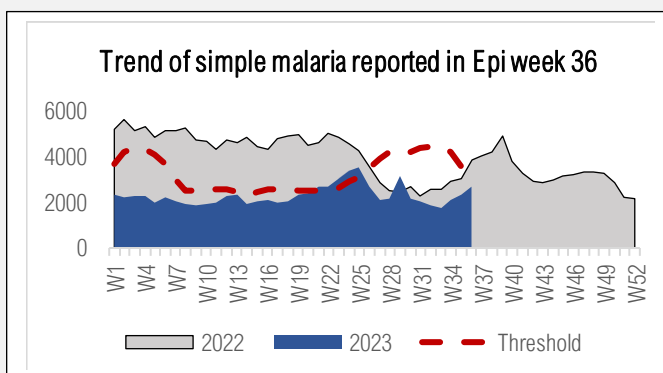
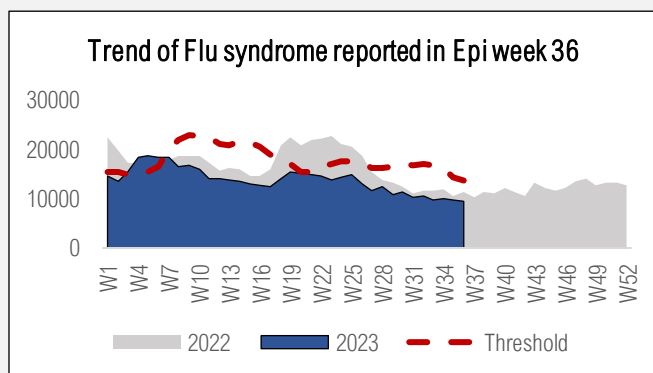


Distribution of immediate reportable diseases in Epi week 36

B. WEEKLY REPORTABLE DISEASES – EPI WEEK 36

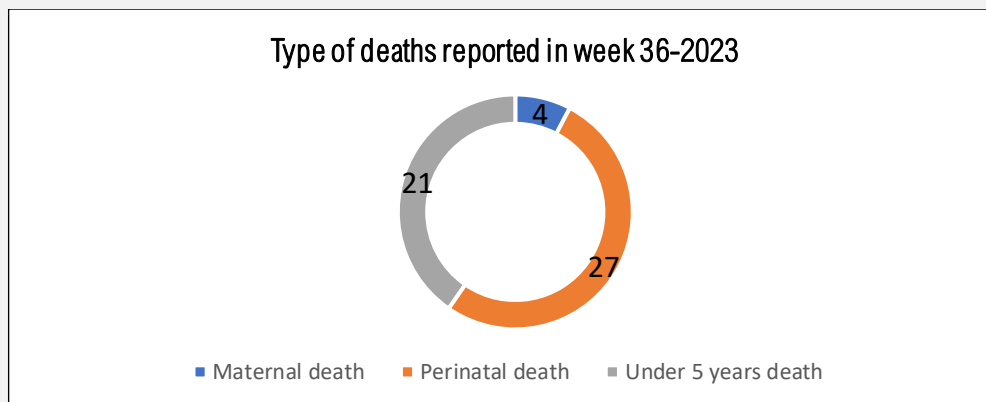
Description: *In Rwanda, after the adaptation of the IDSR 3rd edition, eight diseases & events are being reported and analyzed on a weekly basis. These include flu syndrome, simple malaria, severe pneumonia for under 5 years, non-bloody diarrhea for under 5 years, COVID-19, dog bites, brucellosis, and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

In Epi Week 36, 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 no disease crossed the epidemic threshold.



C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 36

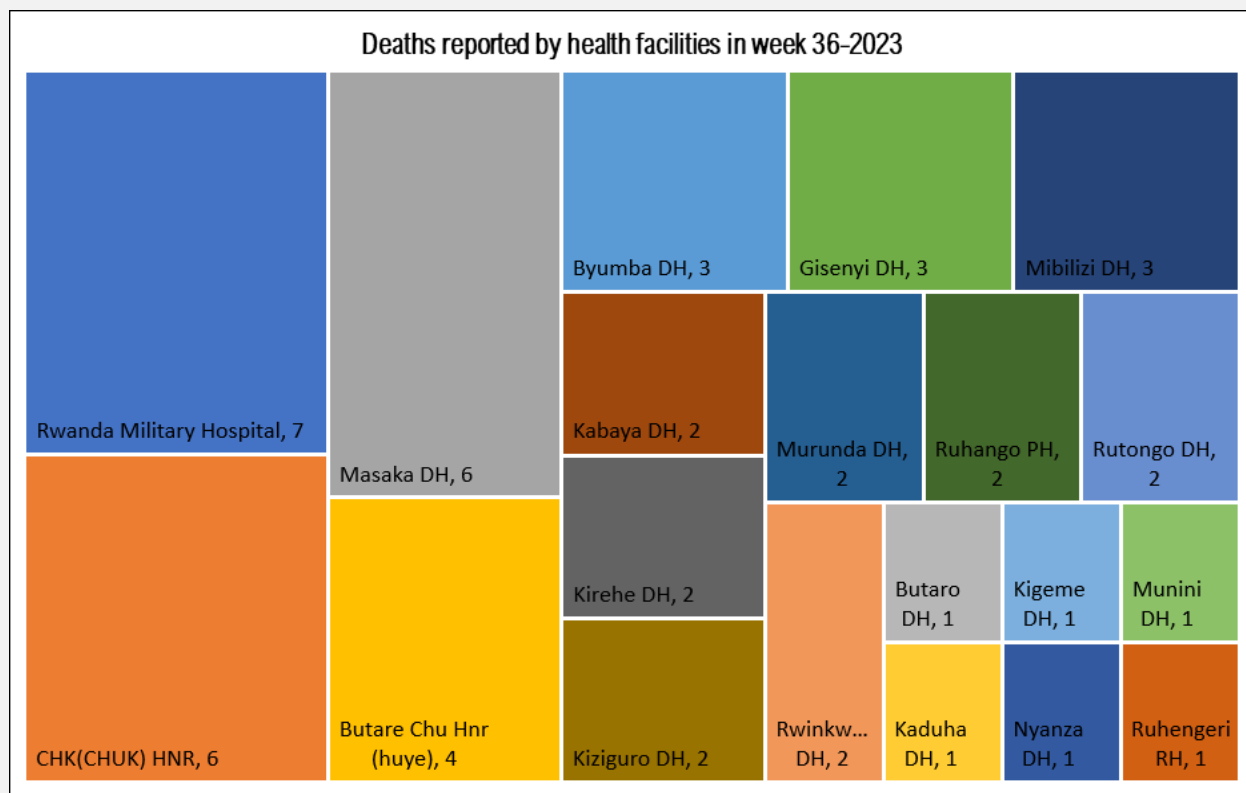
In Epi week 36, as summarized in the Pie Chart below, a total number of 52 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 27(52%) were classified as perinatal, 21 (40%) were deaths of children under 5 years old and 4(8%) maternal deaths.



Cause of deaths declared in epi week 36

Deaths were reported from various catchment areas as follow:

- 7 deaths were reported in Rwanda military hospital
- 6 deaths were reported respectively in CHUK and Masaka DH
- 4 deaths were reported in CHUB
- 3 deaths were reported respectively in Byumba DH, Gisenyi DH and Mibirizi DH
- 2 deaths were reported respectively in Kabaya DH, Kirehe DH, Kiziguro DH, Murunda DH, Ruhango PH, Rutongo DH and Rwinkwavu DH
- 1 death was reported respectively in Butaro DH, Kaduha DH, Kigeme DH, Munini DH, Nyanza DH and Ruhengeri RF.



OUTBREAK AND EVENT UPDATES EPIDEMIOLOGICAL WEEK 36

1. FOODBORNE ILLNESS OCCURRED IN RWAMAGANA DISTRICT, MUNYIGINYA SECTOR, BWANA CELL, RWAMUGURISU VILLAGE

Confirmed cases	0	Date reported:	September 10, 2023	Risk assessment	Low
Suspected cases	79	Source:	eIDSR		
Death(s)	0	District/HFs:	Munyiginya HC/ Rwamagana PH		
Total cases	79	Geoscope:	Low		

Outbreak description:




On 10/09/2023, patients consulted in Munyiginya HC with similar symptoms of abdominal pain, diarrhea, and vomiting following the consumption of sorghum beer (ikigage) in a wedding ceremony held on 09/09/2023. A total of 79 patients were recorded; among them 7 were transferred to Rwamagana PH. The possible cause of the food poisoning was the sorghum beer.

Interventions conducted:

- Case management of the patients

eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 36

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 36, 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 Rwanda military hospital that had a low timeliness score ().

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.

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Hospital catchment area	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	W26	W27	W28	W29	W30	W31	W32	W33	W34	W35	W36		
Nyagatare	100	100	100	100	100	86	93	93	93	93	100	100	86	79	86	94	79	94	94	86	79	93	86	93	100	79	100	100	93	100	100	93	100	100	93	100	93	
Gatunda	100	100	100	100	100	100	100	100	100	78	89	100	89	100	100	100	78	100	100	100	89	89	100	100	100	67	100	100	100	89	100	100	100	100	100	100	100	
Ngarama	88	100	100	100	100	100	88	100	100	100	100	100	100	100	100	100	75	100	100	100	100	100	100	100	88	100	100	100	88	100	100	100	100	100	100	100	100	
Kiziguro	100	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	92	100	100	100	100	100		
Gahini	100	100	100	100	100	89	89	89	78	100	100	78	100	100	100	100	100	78	78	100	100	100	100	89	100	67	78	100	89	100	89	100	78	100	100	89	100	
Rwinkwavu	100	88	100	100	100	100	100	100	100	88	88	88	100	63	75	100	88	100	100	100	100	100	100	100	100	88	88	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	94	94	100	100	100	100	100	94	100	100	100	94	100	94	100	100	100	100	100	100	
Kirehe	100	100	100	100	95	95	100	100	100	90	95	100	90	100	90	100	85	95	95	100	100	100	100	95	100	85	100	100	95	95	85	100	100	100	100	100	100	
Rwamagana	76	65	53	82	76	88	100	100	94	100	100	94	94	94	100	88	71	94	94	100	100	94	88	88	88	89	100	94	100	100	94	94	100	100	100	94	100	
Nyamata	100	88	76	94	88	94	94	100	88	100	88	100	94	76	100	100	76	100	100	82	94	88	100	94	88	47	76	94	82	76	82	94	88	88	94	82	100	
Kinihira	100	100	100	100	89	100	89	67	100	89	78	89	100	89	89	89	89	89	89	100	100	100	67	100	89	100	100	89	78	100	89	100	100	100	100	100	100	100
Rutongo	93	87	93	73	100	100	100	100	100	93	93	100	93	100	100	100	100	100	100	93	100	93	93	93	100	100	100	93	100	100	100	100	100	100	100	100	100	100
Gatonde	100	86	100	100	100	100	100	100	100	86	100	100	86	100	100	100	71	100	100	100	100	100	100	71	100	100	100	100	100	100	100	100	86	100	100	100	100	
Butaro	80	85	80	75	65	90	85	95	90	95	90	90	85	75	85	95	75	85	85	85	90	85	85	90	95	60	100	95	90	100	85	90	100	100	90	100	100	
Ruli	100	100	100	100	100	100	90	100	100	100	90	90	100	100	100	90	100	100	100	100	100	100	100	100	100	90	100	100	100	100	100	100	100	100	100	100	100	
Nemba	100	100	89	100	100	89	100	100	100	89	78	100	100	78	100	100	67	89	89	100	100	89	100	89	89	89	89	100	100	100	100	100	100	78	100	100	100	
Ruhengeri	94	89	89	100	83	89	83	72	94	94	94	78	94	83	89	89	89	100	100	94	89	89	100	100	100	89	100	94	89	94	94	100	89	89	100	100	100	
Byumba	96	100	96	96	88	96	100	100	100	96	96	96	96	81	96	96	96	96	96	96	100	96	96	100	96	96	100	100	100	100	100	100	100	100	96	100	100	
CHUB	0	100	100	100	100	100	100	0	0	0	0	100	100	0	100	100	0	100	100	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Kabutare	84	89	89	95	84	89	89	89	84	95	74	100	100	79	100	100	53	95	95	100	100	100	84	89	95	79	95	100	95	95	100	100	100	100	89	95	100	
Kabgayi	100	92	92	85	92	77	92	85	85	100	92	92	92	69	92	92	69	100	100	100	92	100	92	92	100	92	100	100	92	100	92	100	100	100	100	100	100	100
Kibilizi	100	100	100	100	100	100	82	100	100	100	100	100	82	91	82	91	91	91	100	100	100	100	100	100	100	91	100	100	100	100	100	100	100	100	100	91	100	100
Gakoma	83	100	100	100	83	67	83	100	83	100	100	100	67	50	83	67	50	83	83	83	67	100	83	50	100	83	100	100	100	100	100	100	83	100	100	100	83	100
Gitwe	100	100	89	89	89	78	100	78	100	100	89	89	100	67	100	78	44	89	89	100	89	89	89	100	100	56	89	100	89	100	89	100	89	89	100	100	100	
Ruhango	88	88	88	100	88	88	75	88	88	88	100	63	75	50	63	50	38	75	75	63	75	63	100	63	100	75	100	100	75	88	100	63	88	88	100	100	100	
Remera	100	100	100	93	100	100	100	100	100	100	93	100	93	93	93	100	93	93	93	100	100	93	93	87	100	93	100	100	93	100	93	100	93	100	100	93	100	
Rukoma	100	100	100	93	100	100	100	100	100	100	93	100	93	93	93	100	93	93	93	100	100	93	93	87	100	93	100	100	93	100	93	100	93	100	100	93	100	
Nyanza	84	84	89	79	74	100	89	84	63	89	84	74	68	47	89	95	47	89	89	89	84	95	89	95	95	74	84	95	79	95	95	95	95	95	95	89	100	
Kigeme	77	69	92	92	100	92	100	92	100	100	92	100	92	46	100	85	46	100	100	92	92	100	92	100	100	92	100	100	100	100	85	100	100	100	100	100	100	
Kaduha	100	90	90	100	100	100	100	100	90	100	100	90	90	80	90	100	60	90	90	90	90	100	90	80	100	70	90	100	100	100	100	100	100	100	100	100	100	
Munini	100	94	100	100	100	94	94	100	100	94	88	94	100	82	100	100	88	82	82	88	94	88	100	88	100	100	100	94	100	94	94	100	100	100	100	94	100	
Bushenge	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	63	100	100	100	100	100	100	100	88	88	88	75	100	100	88	88	100	100	100	100	100	
Kibogora	100	100	100	100	100	100	93	100	100	100	100	100	100	100	93	93	86	100	100	93	100	100	100	100	93	100	100	93	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	92	92	100	92	85	100	92	100	100	100	92	100	92							