



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 04 – 2024

(22-28 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 04/2024

Event Based Surveillance (EBS) Highlights:

- During the epidemiological week 04, five human deaths and one signal of dog bite were notified through the electronic Community Event Based Surveillance System (eCEBS)

Alert identified through the Epidemic Intelligence from Open Source (EIOS):

- Gov't intensifies efforts to combat polio, Rift Valley Fever, Red Eye Disease outbreaks in Kenya
- Red Eye Disease Outbreak: Tanzania's Affliction Spreads to Coastal Kenya

Indicator Based Surveillance (IBS) Highlights:

- 151 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, typhoid fever, snake bite and chicken pox.
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for Epi Week 04 revealed that flu syndrome, severe pneumonia and Covid19 surpassed the epidemic thresholds.
- A total of 81 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 04

- No outbreak occurred

Completeness and timeliness

In Epi Week 04, the overall completeness and timeliness of surveillance data reporting in Rwanda was 99% and 98% respectively.

WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 04

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 04, five human deaths and one dog bite were notified from community through eCBS:

- 5 human deaths: respectively 1 death from Kabeza, Cyivugiza, Nyakabingo and 2 deaths from Kirabo villages
- 1 signal of dog bite from Nshano Village

MEDIA SCAN

- Gov't intensifies efforts to combat polio, Rift Valley Fever, Red Eye Disease outbreaks in Kenya
<https://www.citizen.digital/news/govt-intensifies-efforts-to-combat-polio-rift-valley-fever-red-eye-disease-outbreaks-in-kenya-n335927>
- Two alerts were notified: Polio outbreak reported in Garissa, Nairobi at high risk
<https://nation.africa/kenya/health/polio-outbreak-reported-in-garissa-nairobi-at-high-risk-4506334>
- Red Eye Disease Outbreak: Tanzania's Affliction Spreads to Coastal Kenya
https://www.linkedin.com/pulse/red-eye-disease-outbreak-tanzanias-affliction-spreads-zaitun-ali-2e2wf?utm_source=share&utm_medium=member_android&utm_campaign=share_via

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 04

During this Epi week, 151 cases of immediate reportable diseases were notified:

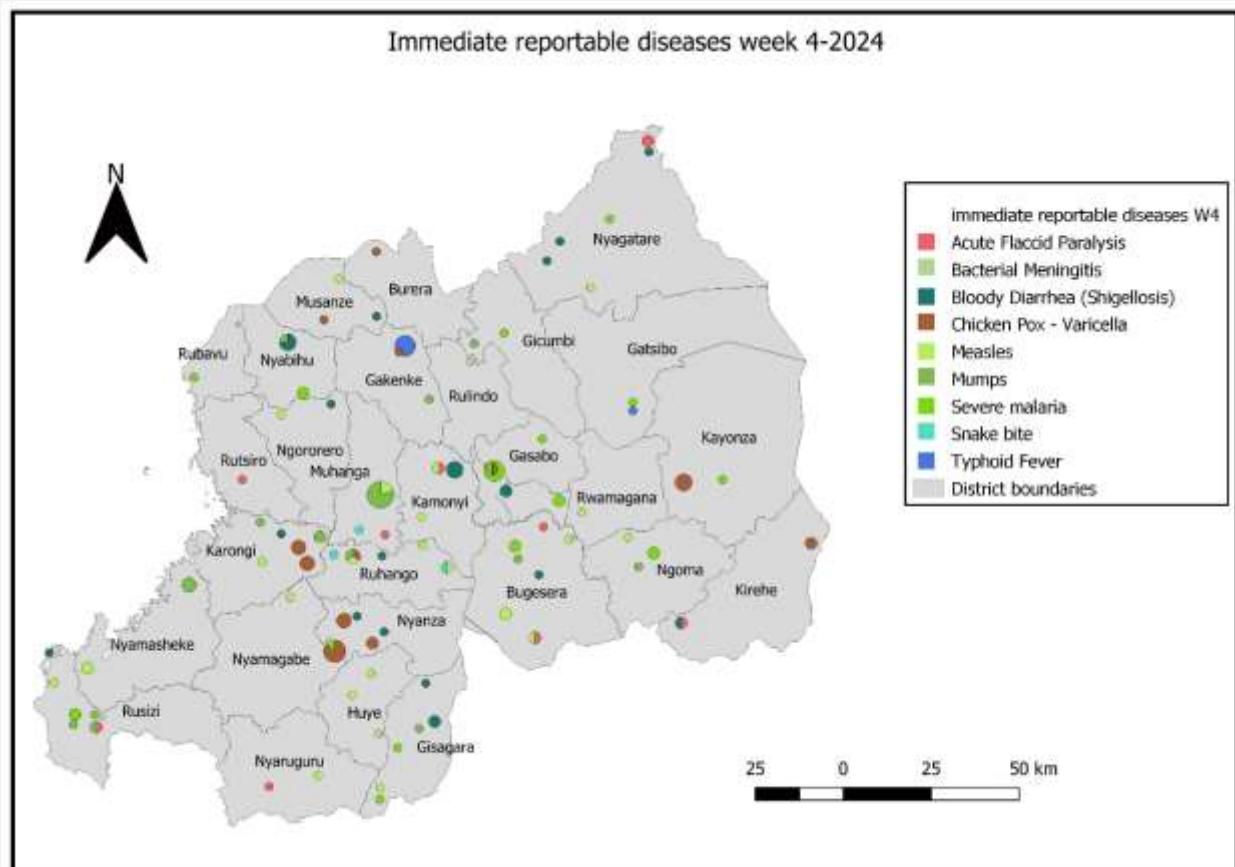
- 30 cases of chicken pox were reported by 13 HFs. No HF crossed the threshold.
- 25 cases of mumps were reported by 15 HCs. No HF crossed the threshold

- 24 suspected cases of bloody diarrhea (Shigellosis) were reported by 17 health facilities. The samples were taken and sent NRL results are still pending.
- 25 suspected cases of Measles/Rubella were reported by 22 HCs. The samples were taken and sent to NRL; results are pending.
- 25 cases of severe malaria were reported by 15 health facilities
- 10 cases of acute flaccid paralysis were reported by 9 health facilities
- 3 snake bite cases were reported by 3 HFs:
- 7 suspected case of typhoid fever were reported by 2 health facilities: 1 case from Kiziguro DH and 6 cases from Nemba DH
- 2 cases of suspected Bacterial meningitis from CHUB and Kinihira PH

Notes:

- For the diseases whose cases crossed the thresholds, District Hospitals are recommended to strengthen surveillance, investigate and reinforce control measures accordingly.
- 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 04

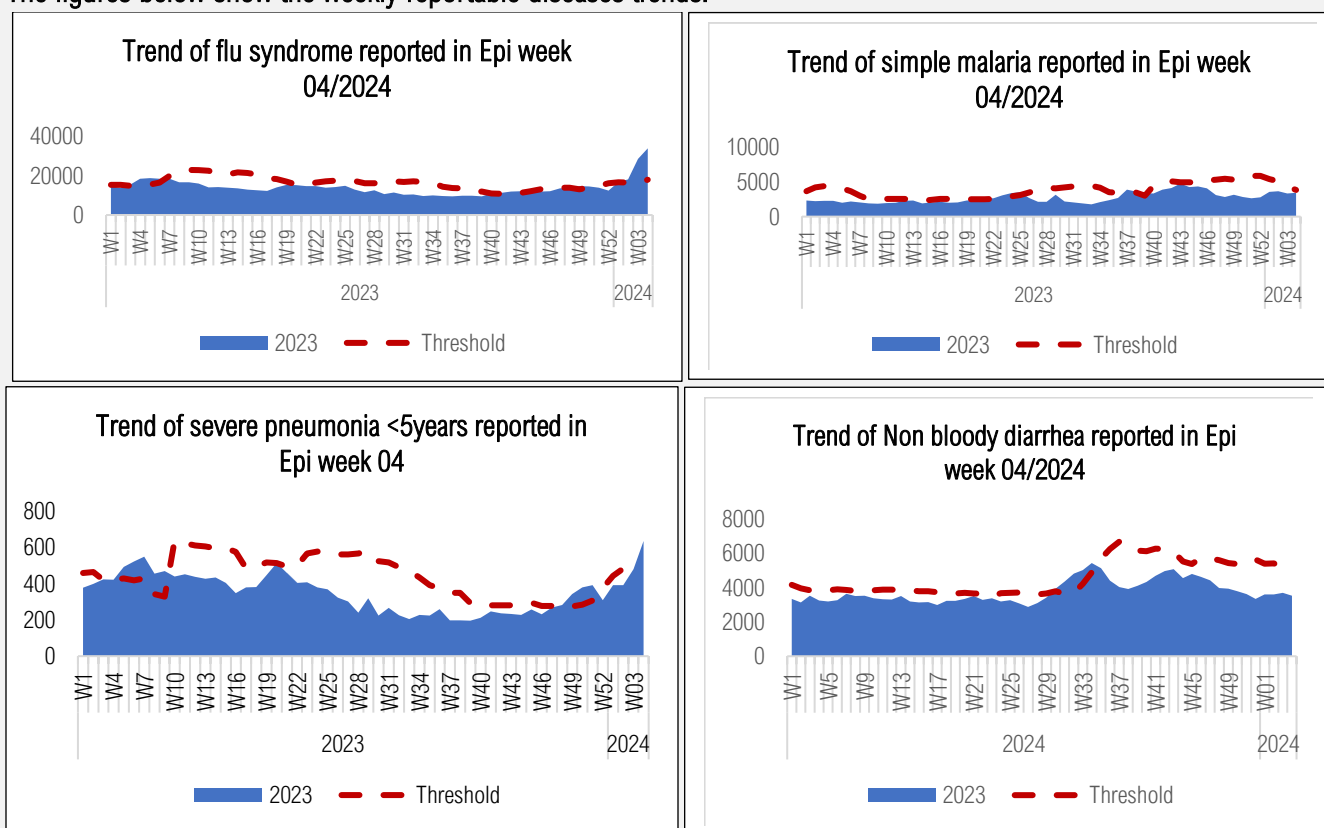
B. WEEKLY REPORTABLE DISEASES – EPI WEEK 04

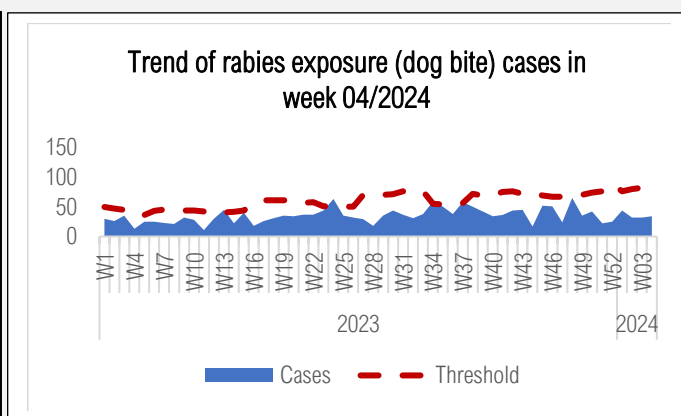
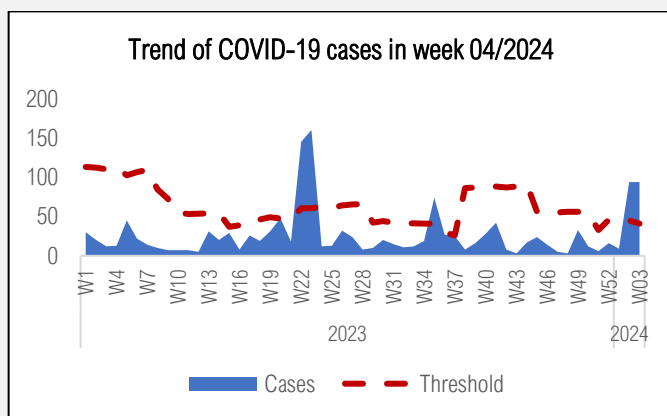
Description: In Rwanda, after the adaptation of the IDSR guidelines 3rd edition, eight diseases events are being reported and analyzed on a weekly basis. These include flu syndrome, simple malaria, severe pneumonia for under 5 years, non-bloody diarrhea for under 5 years, COVID-19, dog bites, brucellosis,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

In Epi Week 4, 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.

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

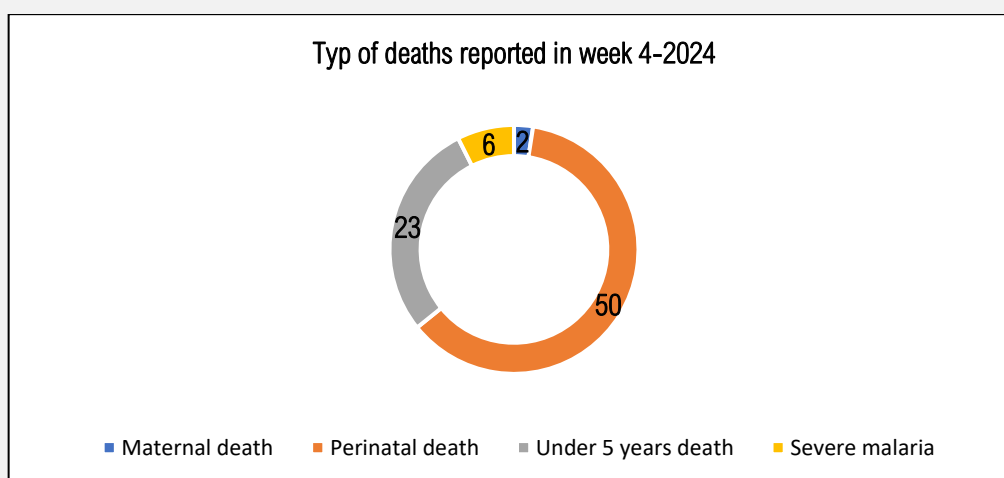
The figures below show the weekly reportable diseases trends:





C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 04

As summarized in the Pie Chart below, a total number of 81 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 50 (62%) were perinatal, 23 (28%) were deaths of children under 5 years old (including 2 deaths due to severe pneumonia), 6 (7%) deaths due to severe malaria, and 2 (2%) maternal deaths.

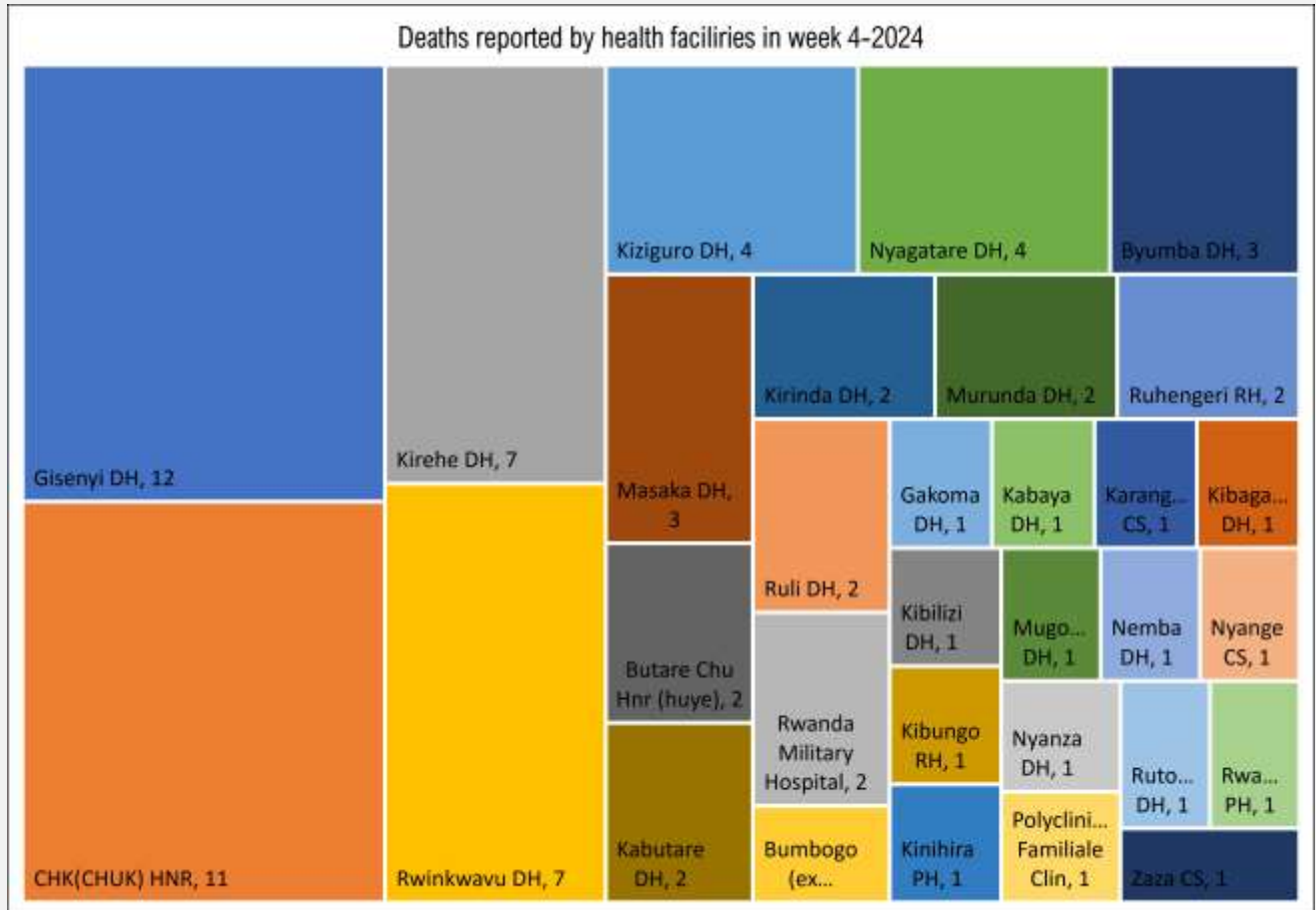


Cause of deaths declared in epi week 04

81 deaths were reported from various catchment areas as follow:

- 12 deaths were reported by Gisenyi DH: 7 perinatal deaths; 4 under 5 years deaths and 1 maternal death
- 11 deaths were reported CHUK: 6 perinatal deaths; 2 under 5 years deaths and 3 deaths due to severe malaria
- 4 deaths reported respectively by Rwinkwavu DH (4 perinatal and 3 under 5 deaths) and Kiziguro DH (2 perinatal and 2 under 5 deaths),
- 3 deaths were reported respectively by Byumba DH (1 was perinatal death, 1 under 5 years death and 1 maternal death), Masaka DH (all were perinatal deaths)
- 2 deaths were reported respectively by CHUB, Kabutare DH, Kirinda DH, Murunda DH, Ruhengeri RH, Ruli DH (All were perinatal death), Rwanda Military Hospital (1 maternal death and 1 under 5 years death)

- 1 death was reported respectively by Kabaya DH, Mugonero DH, Nyanza DH, Polyclinique familiale Clinique (all were perinatal deaths), Gakoma DH, Karangazi HC, Kibagabaga DH, Kibilizi DH, Kibungo RH, Kinihira PH (all were under 5 years deaths), 1 death due to severe malaria (Bumbogo ex-Gikomero I) and Zaza HC






Distribution of deaths by health facilities in Epi week 04

OUTBREAK AND EVENT UPDATES IN EPIDEMIOLOGICAL WEEK 04

- No outbreak identified

eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 04

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 04, the overall completeness and timeliness of disease surveillance data reporting in Rwanda was 99% and 98%, respectively. With regards to completeness of surveillance reports, almost all hospitals had a high completeness (>80%), except two hospitals: Kacyiru and CARAES Ndera. For the timeliness, almost all hospitals had a high completeness (>80%), except two hospitals: Kacyiru police 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	Hospital catchment	W01	W02	W03	W04
Nyagatare	100	100	100	100	Nyagatare	93	93	100	100
Gatunda	100	100	100	100	Gatunda	100	100	100	100
Ngarama	100	100	100	100	Ngarama	100	100	100	100
Kiziguro	100	100	100	100	Kiziguro	100	100	100	100
Gahini	100	100	100	100	Gahini	100	100	100	100
Rwinkwavu	100	100	100	100	Rwinkwavu	100	88	100	100
Kibungo	100	100	100	100	Kibungo	94	100	100	100
Kirehe	100	100	100	100	Kirehe	100	100	100	100
Rwamagana	94	94	100	100	Rwamagana	83	100	100	94
Nyamata	100	88	100	100	Nyamata	100	100	100	88
Kinihira	100	100	100	100	Kinihira	100	89	89	100
Rutongo	100	100	100	100	Rutongo	100	100	87	100
Gatonde	100	100	100	100	Gatonde	100	100	100	100
Butaro	100	100	100	100	Butaro	100	95	95	100
Ruli	100	100	100	100	Ruli	100	100	100	100
Nemba	100	100	100	100	Nemba	100	100	100	100
Ruhengeri	100	100	100	94	Ruhengeri	94	94	100	94
Byumba	100	100	100	100	Byumba	100	100	100	100
CHUB	100	100	100	100	CHUB	100	100	100	100
Kabutare	100	100	100	100	Kabutare	95	100	95	100
Kabgayi	100	100	100	100	Kabgayi	100	100	92	100
Kibilizi	100	100	100	100	Kibilizi	100	91	100	100
Gakoma	100	100	100	100	Gakoma	83	100	100	100
Gitwe	100	100	100	100	Gitwe	100	100	89	100
Ruhango	100	100	100	100	Ruhango	100	88	100	100
Remera Rukoma	100	100	100	100	Remera Rukoma	100	100	100	93
Nyanza	100	95	95	95	Nyanza	95	95	100	100
Kigeme	100	100	100	100	Kigeme	100	100	100	100
Kaduha	100	100	100	100	Kaduha	100	90	100	100
Munini	100	100	100	100	Munini	100	100	100	100
Bushenge	100	100	100	100	Bushenge	100	100	88	100
Kibogora	100	100	100	100	Kibogora	100	100	100	93
Kibuye	100	100	100	100	Kibuye	100	100	100	100
Kirinda	100	100	100	100	Kirinda	100	100	100	100
Mugonero	100	100	100	100	Mugonero	100	100	100	100
Shyira	88	100	100	100	Shyira	88	100	100	100
Muhororo	100	100	100	100	Muhororo	100	100	90	100
Kabaya	100	100	100	100	Kabaya	100	100	86	100
Gihundwe	100	100	100	100	Gihundwe	100	100	100	100
Mibilizi	100	100	100	100	Mibilizi	100	100	100	100
Gisenyi	100	100	100	100	Gisenyi	94	100	100	94
Murunda	95	100	100	100	Murunda	95	100	100	100
CHUK	100	100	100	100	CHUK	100	0	100	100
Nyarugenge	89	100	100	100	Nyarugenge	89	89	89	100
Muhima	100	100	100	100	Muhima	100	100	100	100
RMH	0	100	100	100	RMH	0	100	100	100
Masaka	92	100	100	100	Masaka	92	100	100	100
Kigababaga	95	100	100	90	Kigababaga	80	95	100	85
Kacyiru	100	100	100	0	Kacyiru	100	0	100	0
KFH	0	100	100	100	KFH	0	100	100	100
Caraes Ndera	100	100	100	0	Caraes Ndera	0	100	100	0
Nyabikenke	100	100	100	100	Nyabikenke	100	100	100	100
Rwanda	99	99	100	99	Rwanda	97	98	98	98