



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 45 – 2023

(06-12 November 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 45

Event Based Surveillance (EBS) Highlights:

- During the epidemiological week 45, eight deaths were notified through the electronic Community Event Based Surveillance System (eCEBS).
- Two alerts were identified through the Epidemic Intelligence from Open Source (EIOS):
 - Tropical diseases move north
 - FAO: prevent El Niño from worsening world hunger

Indicator Based Surveillance (IBS) Highlights:

- 327 immediate reportable diseases were notified by health facilities countrywide. These include the cases of acute flaccid paralysis (AFP), foodborne illness, mumps, severe malaria; bloody diarrhea, measles/rubella, cholera, and chicken pox.
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for Epi Week 45 revealed that no disease surpassed the epidemic threshold.
- A total of 61 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 45

- One ongoing outbreak:
Rubella outbreak in Karongi District, Kiziba Refugee Camp
- One outbreak occurred:
Food borne illness in in Ngoma district, Rukira sector, Cyibatsi cell, Gahushi Village Gahushi Groupe Scolaire

Completeness and timeliness

In Epi Week 45, the overall completeness and timeliness of surveillance data reporting in Rwanda was 98% and 96% respectively.

WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 45

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 45, eight human deaths were notified from community

- 3 deaths from Ngororero District
- 2 deaths from Rusizi District
- 1 death from Gicumbi District
- 1 death from Gatsibo District
- 1 death from Karongi District

MEDIA SCAN

Two alerts from EIOS:

-Tropical diseases move north

As Earth warms, the creatures that spread neglected tropical diseases are gaining a foothold in Europe. Wealthy countries must prepare themselves for more cases. Europe long thought itself safe from neglected tropical diseases (NTDs). Those old certainties have now evaporated. A warmer and wetter climate has made the continent more welcoming to vectors of debilitating and sometimes deadly pathogens. Climate change is just one of the forces driving the expansion of NTDs.

Globalization, and the increase in international trade and travel that it brings, is playing its part in bringing vectors and their pathogens together in Europe. Although the impact of these diseases is not on the scale of that in tropical countries, the effects on European public health are already being felt. People are catching, and sometimes dying from, NTDs and other mosquito-borne diseases that were once confined to the tropics, such as West Nile, Zika, dengue and chikungunya viruses, as well as parasitic diseases such as schistosomiasis. Cases of vector-borne diseases that are already endemic in Europe, such as leishmaniasis, are on the rise. For many of these infections, there is no vaccine or cure. Europe is not alone. Parts of the non-tropical world that have previously had the luxury of not worrying about NTDs.

-FAO: prevent El Niño from worsening world hunger

Faced with the looming threat of El Niño which is expected to severely affect millions of people, FAO has presented an updated **Anticipatory Action and Response Plan** to reduce impacts on agricultural livelihoods and food security of the most at-risk and vulnerable populations.

According to the Plan, FAO urgently needs nearly US\$160 million to provide support to more than 4.8 million people by March 2024. The Plan currently prioritizes actions in 34 countries in eastern and southern Africa, Asia, Pacific, Latin America and the Caribbean, identified based on an assessment of historical El Niño impacts and other key factors, such as the latest seasonal climate forecasts, agricultural seasonality and current vulnerabilities. In other countries, FAO has put in place advanced preparations, involving local partners and commodity suppliers, to ensure that activities can begin quickly once new triggers are reached <https://greenreport.it/news/clima/fao-evitare-che-el-nino-aggravi-la-fame-nel-mondo/>

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 45

During this Epi week, 327 cases of immediate reportable diseases were notified:

- 36 cases of chicken pox were reported by 17 HFs. None crossed the threshold.
- 45 cases of mumps were reported by 20 HCs. No HC crossed the threshold.
- 79 cases of foodborne illness were reported by four health facilities, included Byahi, Gituku, Kibungo RH, Musenyi HC.
- 86 suspected cases of bloody diarrhea (Shigellosis) were reported by 35 HCs. Results of samples sent to NRL from 7 to 14/11/2023 did not reveal shigella dysenteriae, they were other type of shigella flexineli and sonnei.
- 45 suspected cases of Measles/Rubella were reported by 29 HCs. In the previous Epi week 44; 5 samples were tested positive on Rubella including 3 samples from Kiziba camp HC in Karongi district, 1 sample from Ruhuha HC in Nyamata district, and 1 sample from Kaduha DH in Nyamagabe district.
- 29 cases of severe malaria were reported by 15 health facilities, including CHUK, Cyinzuzi HC, Gakoma DH, Kabaya DH, Kibilizi DH, Kibuye RH, Kigeme DH, Kinihira PH, Kirehe DH, Mukungu HC, Muyanza HC, Nyagatare DH, Rutongo DH, Rwinkwavu DH and St. François HC.
- 6 cases of acute flaccid paralysis were reported by 6 health facilities: Mahama Refugee Camp HC, Mushongi HC, Nzangwa HC and Remera-Mbogo HC
- 1 case of Cholera case was reported by Shyira HC

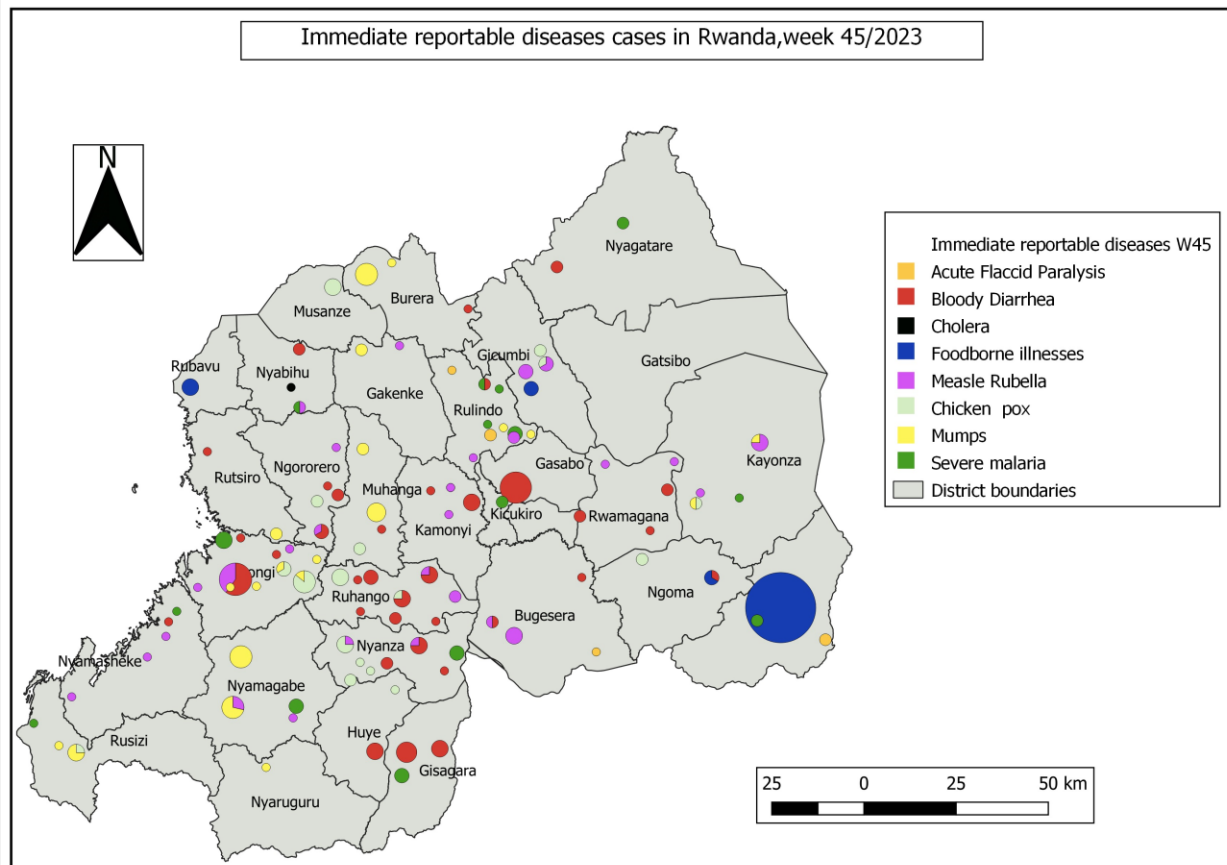
Notes:

For the diseases whose cases crossed the thresholds, District Hospitals are recommended to investigate.

For diseases requiring laboratory confirmation, the samples were collected and sent to the National Reference Laboratory for confirmation.

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

Geographical distribution of cases:



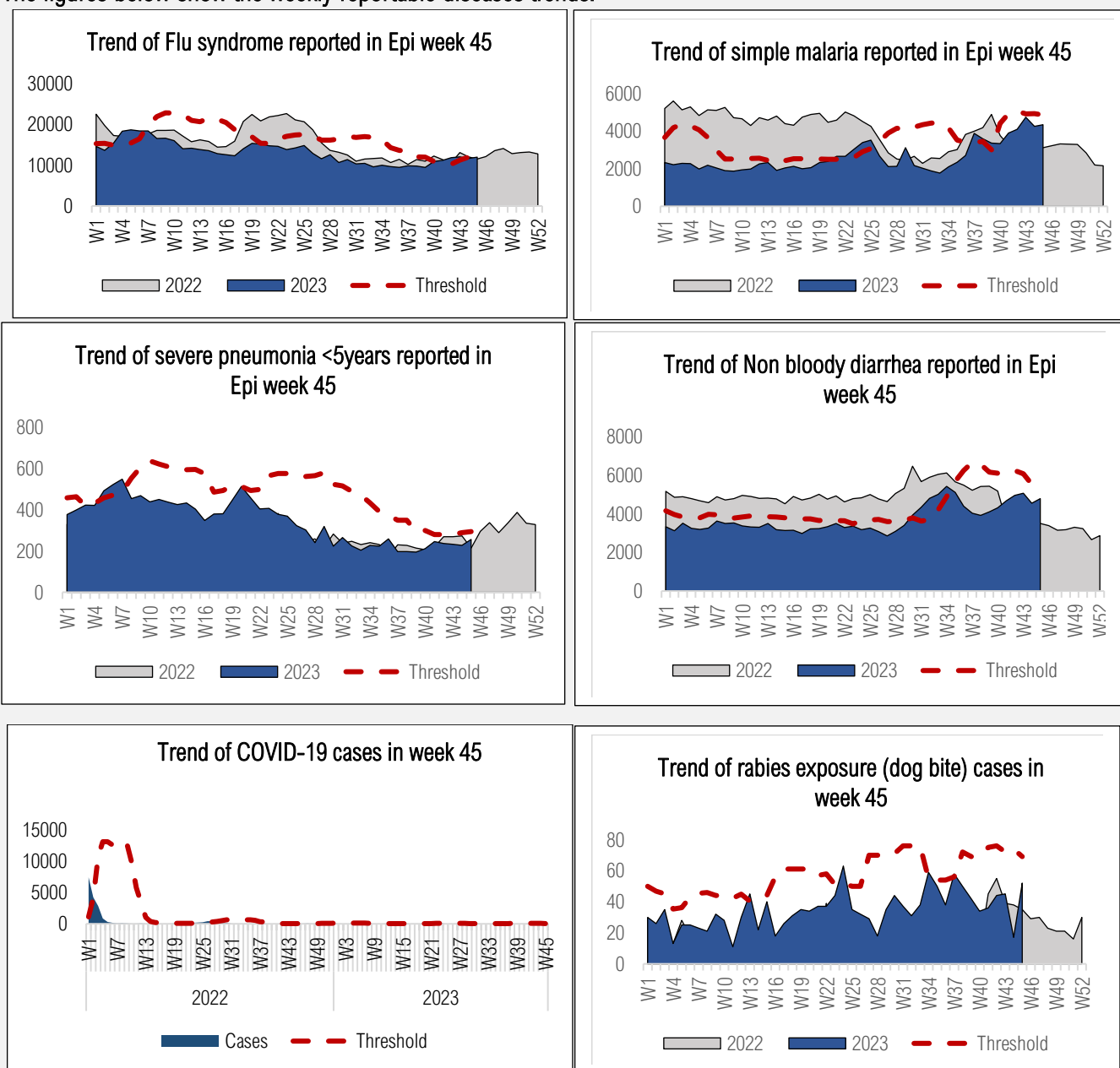
Distribution of immediate reportable diseases in Epi week 45

B. WEEKLY REPORTABLE DISEASES – EPI WEEK 45

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 45, 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 surpassed the epidemic threshold.

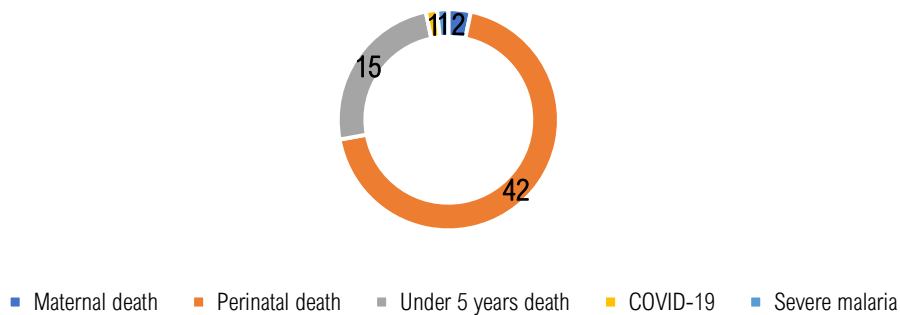
The figures below show the weekly reportable diseases trends:



C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 45

As summarized in the Pie Chart below, a total number of 61 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 42 (69%) were perinatal, 15 (25%) were deaths of children under 5 years old (including 1 death due to non-bloody diarrhea), 2 (3%) maternal deaths: 1 (2%) death due to covid19 and 1(2%) death due to severe malaria.

Type of deaths reported in week 45/2023

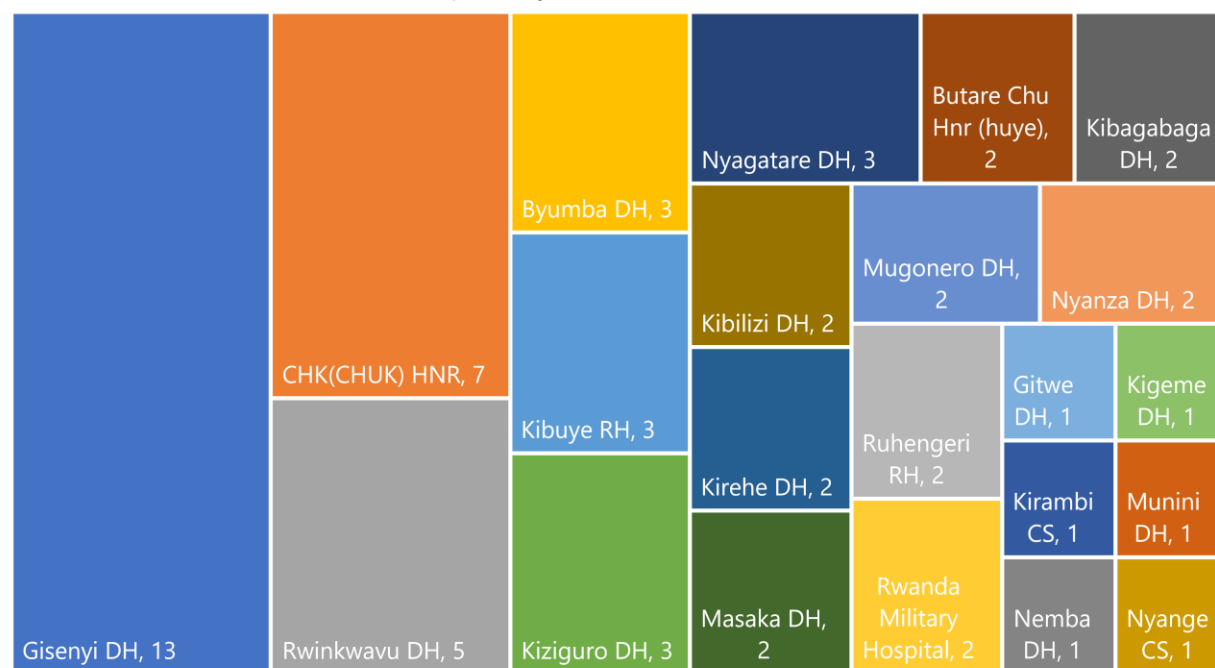


Cause of deaths declared in epi week 45

Deaths were reported from various catchment areas as follow:

- 13 deaths were reported by Gisenyi DH
- 7 deaths were reported by CHUK
- 5 deaths were reported Rwinkwavu DH
- 3 deaths were reported respectively by Byumba DH, Kibuye RH, Kiziguro DH, Nyagatare DH,
- 2 deaths were reported respectively by Masaka DH, CHUB
- 2 deaths were reported respectively by Nyanza DH, Ruhengeri RH, CHUB, Kibagabaga DH, Kibilizi DH, Kirehe DH, Masaka DH, Mugonero DH and Rwanda Military Hospital
- 1 death was reported respectively by Gitwe DH, Kigeme DH, Munini DH, Nemba DH, Kirambi HC and Nyange HC

Deaths reported by health facilities in week 45/2023



Distribution of deaths by health facilities in Epi week 45

OUTBREAK AND EVENT UPDATES IN EPIDEMIOLOGICAL WEEK 45

1. RUBELLA OUTBREAK IN KIZIBA REFUGEE CAMP IN KARONGI DISTRICT

Confirmed cases	05	Date reported:	October 18, 2023	Risk assessment	Low
Suspected cases	17	Source:	eIDSR		
Death(s)	0	District/HFs:	Kiziba camp/ Kibuye RH		
Total cases	22	Geoscope:	Low		

Outbreak description:

On 18/10/2023, Kiziba Camp HC collected 11 suspected samples of Measles/Rubella, among them 2 were tested positive for Rubella. Following that, an active case search was conducted; and in the previous week 3 additional cases tested positive on Rubella which makes it a total of 5 cases. In the previous week, 6 suspect cases were reported, samples were taken, and results are pending.

Interventions conducted:

- Case management of patients
- Active cases search within the refugee camp.

2. FOOD BORNE ILLNESS IN GAHUSHI GROUPE SCOLAIRE IN NGOMA DISTRICT, RUKIRA SECTOR, CYIBATSI CELL, GAHUSHI VILLAGE

Confirmed cases	0	Date reported:	November 9, 2023	Risk assessment	Low
Suspected cases	70	Source:	eIDSR		
Death(s)	0	District/HFs:	Gituku HC/Kibungo RH		
Total cases	70	Geoscope:	Low		

Outbreak description:

On 09/11/2023; students from Gahushi GS consulted Gituku HC presenting vomiting, abdominal pain and headache after lunch that consisted of beans and kawunga . A total of 70 students were affected and treated by Gituku health center. Among them, 26 students were admitted for observation and 2 students were transferred to Kibungo RH for further treatment. All students have recovered and have been discharged.

Interventions conducted:

- Cases management
- The samples of the beans and had been taken for being tested at Rwanda Forensic Laboratory
- The Rapid Response Team conducted education about food hygiene
- No stool samples were collected.

eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 45

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 45, the overall completeness and timeliness of disease surveillance data reporting in Rwanda was 98% and 96%, respectively. With regards to completeness of surveillance reports, almost all hospitals had a high completeness (>80%), except Rwanda Military Hospital which had a low completeness (less than 60%). For the timeliness, the overall score was 96%, and almost all hospitals had a high timeliness (>80%), except Muhima DH which had a moderate timeliness (between 60 and 79%), Rwanda Military Hospital that had a low score (less than 60%).

Notes: The health facilities 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.

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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	W37	W38	W39	W40	W41	W42	W43	W44	W45			
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	93	100	93	100	93	93	100	100	89	100	93	100	86	93	86	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	100	89	100	100	100	93	100	100	100		
Ngarara	88	100	100	100	100	100	88	100	100	100	100	100	100	100	100	100	75	100	100	100	100	100	100	100	100	88	100	100	100	88	100	100	100	100	100	100	88	100	88	88	100	100	100	100	88			
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	100	100	100	100	100	100	100	100	100			
Gahini	100	100	100	100	100	89	89	89	89	78	100	100	78	100	100	100	100	78	78	100	100	100	89	100	67	78	100	89	100	89	100	78	100	100	89	89	89	89	89	100	89	100	100	100	100	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	100	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	94	100	100	100	100	94	100	94	100	100	100	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	100	90	100	100	85	95	95	100	100	100	100	100	100	85	100	100	100	95	95	100	100	100	100	100	100	100	90	100	95	100	100	100	95			
Rwamagana	76	65	83	82	76	88	100	100	94	100	94	94	94	100	88	71	94	94	100	100	94	88	88	89	100	94	100	100	94	94	100	100	100	94	100	89	100	100	100	100	100	94	100	100	94	100	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	88	94	88	100	65	100	100	100	100	100	100	
Kinirira	100	100	100	100	89	100	89	67	100	89	78	89	100	89	89	89	89	89	89	89	100	100	67	100	89	100	100	89	78	100	89	100	100	100	100	100	100	100	100	100	89	100	100	100	100	100	100	
Rutoro	93	87	93	73	100	100	100	100	100	93	93	100	93	100	100	100	100	100	93	100	93	93	93	93	93	100	100	93	100	100	100	100	100	100	100	100	93	100	100	100	100	100	100	93	100	100	93	
Gatonde	100	86	100	100	100	100	100	100	100	86	100	100	86	100	100	100	71	100	100	100	100	100	100	100	71	100	100	100	100	100	100	86	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Butaro	80	85	80	75	65	90	85	95	90	95	90	90	85	75	85	95	75	85	85	90	85	85	90	95	60	100	95	90	100	85	90	100	90	100	90	90	90	90	95	95	95	95	95	95	95	95		
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	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	89	100	100	100	100	100	70	100	100	100	
Ruhengeri	94	89	89	100	83	89	83	72	94	94	78	94	83	89	89	89	100	100	94	89	89	100	100	100	88	100	94	89	94	94	100	89	89	100	100	100	94	100	100	100	100	100	94	94	100	100		
Byumba	96	100	96	96	88	96	100	100	96	96	96	96	81	96	96	96	96	96	96	96	96	96	96	96	96	96	96	100	100	100	100	100	100	100	100	96	100	96	100	100	100	100	100	100	100			
CHUB	0	100	100	100	100	100	0	0	0	0	100	100	0	100	100	0	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		
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	95	95	95	100	100	95	89	89	89	89		
Kabagayi	100	92	92	85	92	77	92	85	85	100	92	92	92	69	92	92	69	100	100	100	92	100	92	92	92	92	100	92	100	92	100	92	100	100	100	100	100	100	100	85	92	100	100	100	100	100		
Kibilizi	100	100	100	100	100	100	82	100	100	100	100	82	91	82	91	91	91	100	100	100	100	100	100	100	100	91	100	100	100	100	100	100	100	91	100	100	100	100	100	100	91	100	100	100	91	100	100	91
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	83	100	83	100	83	100	100	100	100	83	100	100	100	83	100	100	100
Gihwe	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	89	100	100	100	100	100	100	100	100	100	67	100	56	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	100	100	75	88	88	100	100	100	100		
Remera	100	100	100	100	100	100	100	100	100	100	93	100	93	93	93	100	93	93	93	100	93	93	87	100	93	100	93	100	93	100	93	100	93	100	93	100	93	87	93	100	93	100	100	100	100	100		
Rukoma	100	100	100	93	100	100	100	100	100	100	93	100	93	93	93	100	93	93	93	100	93	93	87	100	93	100	93	100	93	100	93	100	93	100	93	100	93	100	93	87	93	100	93	100	100	100	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	89	100	89	95	89	100	100	100	84	95	100	100		
Kigeme	77	69	82	92	100	92	100	92	100	100	92	100	92	46	100	85	46	100	100	92	92	100	92	100	92	100	100	100	100	85	100	100	100	100	100	92	100	92	92	92	92	92	92	92	92	92	92	
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	90	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	94	100	94	94	100	100	100	100	94	100	94	100	100	94	100	100	94	100	100	100	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	100	100	100	100	100	88	100	100	100		
Kibogora	100	100	100	100	100	100	93	100	100	100	100	100	100	93	93	86	100	100	100	93	100	100	100	100	93	100	100	93	100	93	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	