



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 43 – 2023

(23-29 October 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 43

Event Based Surveillance (EBS) Highlights:

- During the epidemiological week 43, five deaths were notified through the electronic Community Event Based Surveillance System (eCEBS).
- Two alerts were identified through the Epidemic Intelligence from Open Source (EIOS):
 - October 23, 2023. Rift Valley fever outbreak in Uganda
 - Media Trained as Possible Outbreak of Livestock Diseases Expected During El Nino Rains in Kenya

Indicator Based Surveillance (IBS) Highlights:

- 240 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, bacterial meningitis and chicken pox.
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for Epi Week 43 revealed that the cases of flu syndrome surpassed the epidemic threshold.
- A total of 68 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 updates in week 43

One ongoing outbreak:

Bacillary dysentery outbreak in Karongi district, Rwankuba Sector, Nyarusanga Cell- Kiziba refugee camp

Completeness and timeliness

In Epi Week 43, 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 43

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 43, five human deaths were notified from community:

- 3 deaths from Ngororero district
- 1 death from Rusizi District
- 1 death from Ngoma District

MEDIA SCAN

Two alerts from EIOS:

1. October 23, 2023. Rift Valley fever outbreak in Uganda

Since the beginning of 2023, there have been reports of **Uganda** shoots of **Rift Valley fever** of people, mainly in livestock corridor districts, in the Western and Central regions. In 2023, up to epidemiological week (EW) 36, in total **181 suspected cases** of Rift Valley fever, including 53 confirmed cases and 13 deaths (the lethality rate of 7.2%), in eight districts – Bushenyi, Isingiro, Kabale, Kakumiro, Kazo, Mbarara, Nakaseke and Rubanda – and in Mbarara town. <https://nationworldnews.com/october-23-2023-rift-valley-fever-outbreak-in-uganda/>

2. Media Trained as Possible Outbreak of Livestock Diseases Expected During El Nino Rains in Kenya

Veterinarians have warned of a possible outbreak of livestock disease that might be triggered by the anticipated El Nino rains. According to experts, the torrential rains occasioned by floods create a conducive environment for outbreaks of waterborne and vector borne diseases that may affect livestock in waterlogged areas. Deputy Director, Veterinary Services Jane Njuguna says that the government has put in place measures to mitigate the effects of the above normal rains and was well prepared for any eventualities. Ms. Njuguna confirmed that at least two million doses of RVF vaccines were set aside for possible interventions at the Strategic Reserve based in the Kenya Veterinary Vaccines Production Institute (KEVEVAPI). She said the team was already in the field for outreach programs to create awareness to members of the public of the impending threat and had intensified disease surveillance operations in the risk prone counties.

<https://www.kenyanews.go.ke/fears-over-outbreak-of-livestock-diseases-during-el-nino-rains/>

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 43

During this Epi week, 240 cases of immediate reportable diseases were notified:

- 33 cases of chicken pox were reported by 20 HFs. None crossed the threshold.
- 19 cases of mumps were reported by 14 HCs. None crossed the threshold.
- 4 cases of foodborne illness reported by Gisenyi DH and Byahi HC. For those health facilities, the cases were occurred in week 42 and reported in week 43.
- 109 suspected cases of bloody diarrhea (Shigellosis) reported by 30 HCs. In the previous week, no sample was tested positive on *Shigella dysenteriae*, but other type of shigella had been isolated, including of shigella flexineri in Kiziba camp (3 cases), Biryogo HC (1case) and shigella sonnei in Biryogo HC (1case).
- 48 suspected cases of Measles/Rubella reported by 32 HCs.
- 18 cases of severe malaria reported by 11 health facilities, including Gakoma DH, Kaduha DH, Kibilizi DH, Kibungo RH, Kirehe DH, Masaka DH, Munini DH, Remera Rukoma DH, Rutongo DH, Musambira HC, Mayange (Bugesera) HC.
- 8 cases of acute flaccid paralysis reported by 8 health facilities: Murunda DH, Nemba DH, Ngarama DH, Nyarugenge DH, Matyazo HC, Kinunu HC, Muhoza (Ruhengeri) HC and Tabagwe HC.
- 1 suspected case of bacterial meningitis was reported by Murunda DH.

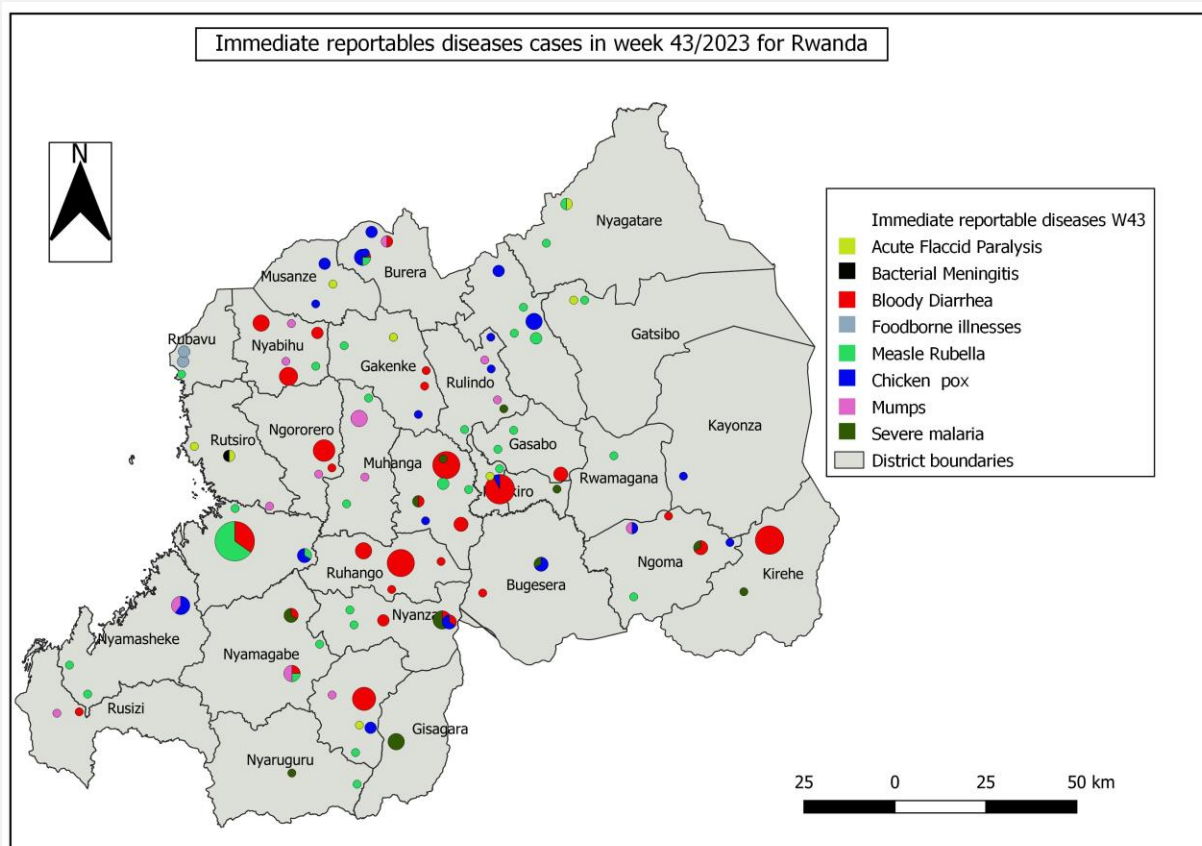
Notes:

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 health facility level.

Geographical distribution of cases:



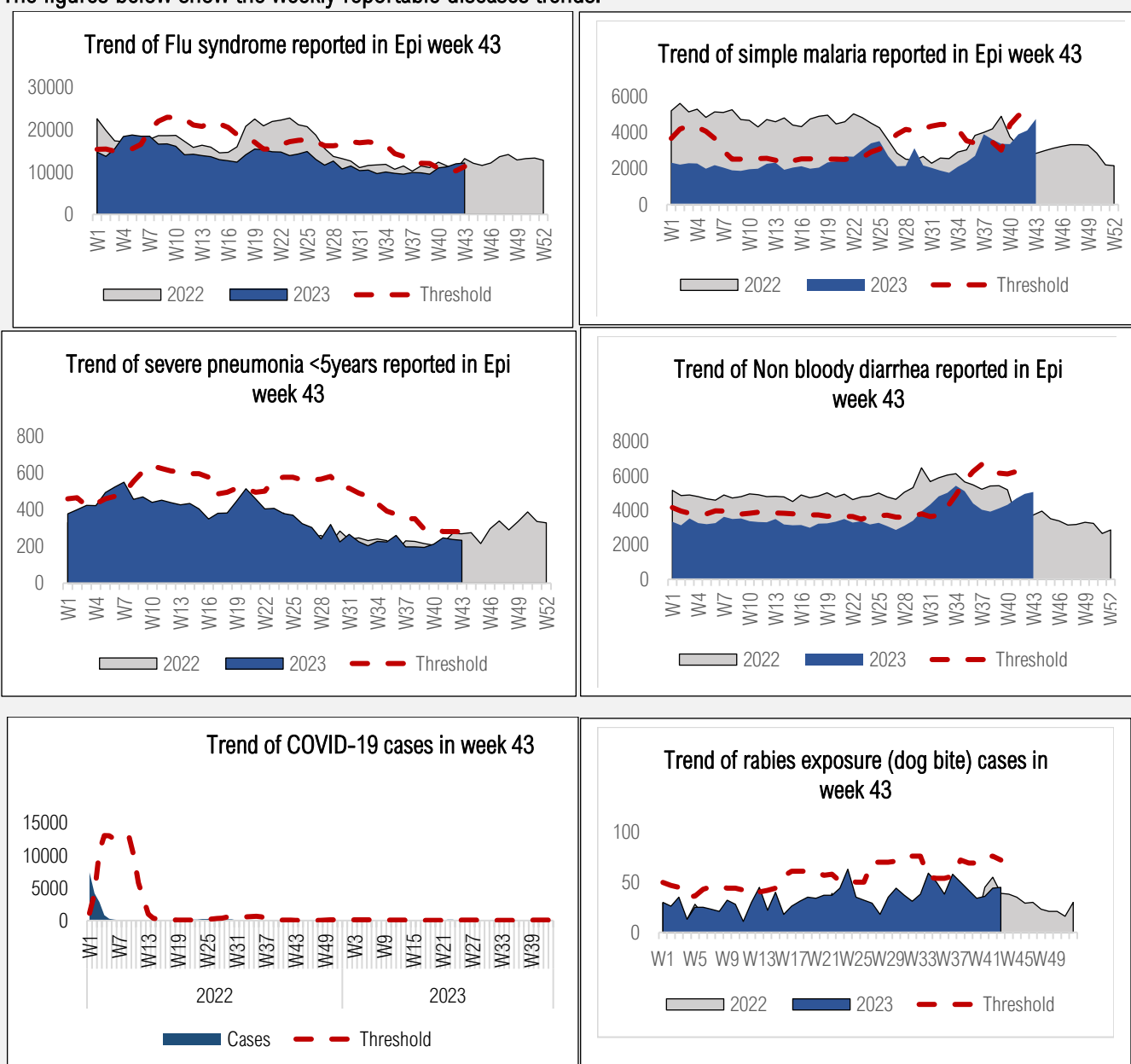
Distribution of immediate reportable diseases in Epi week 43

B. WEEKLY REPORTABLE DISEASES – EPI WEEK 43

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 43, 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 disease surpassed the epidemic threshold, especially in the following Hospital catchment areas: Kabgayi DH, Kabutare DH, Kigeme DH, Nyagatare DH, Ruhengeri RH, Shyira DHs and Rwamagana PH. The DHs that surpassed the threshold are recommended to conduct an investigation.

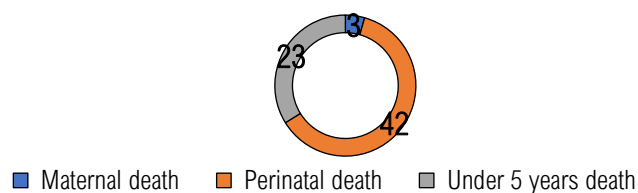
The figures below show the weekly reportable diseases trends:



C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 43

As summarized in the Pie Chart below, a total number of 68 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 42 (62%) were perinatal, 23 (34%) were deaths of children under 5 years old and 2 (4%) maternal deaths.

Type of deaths reported in week 43/2023

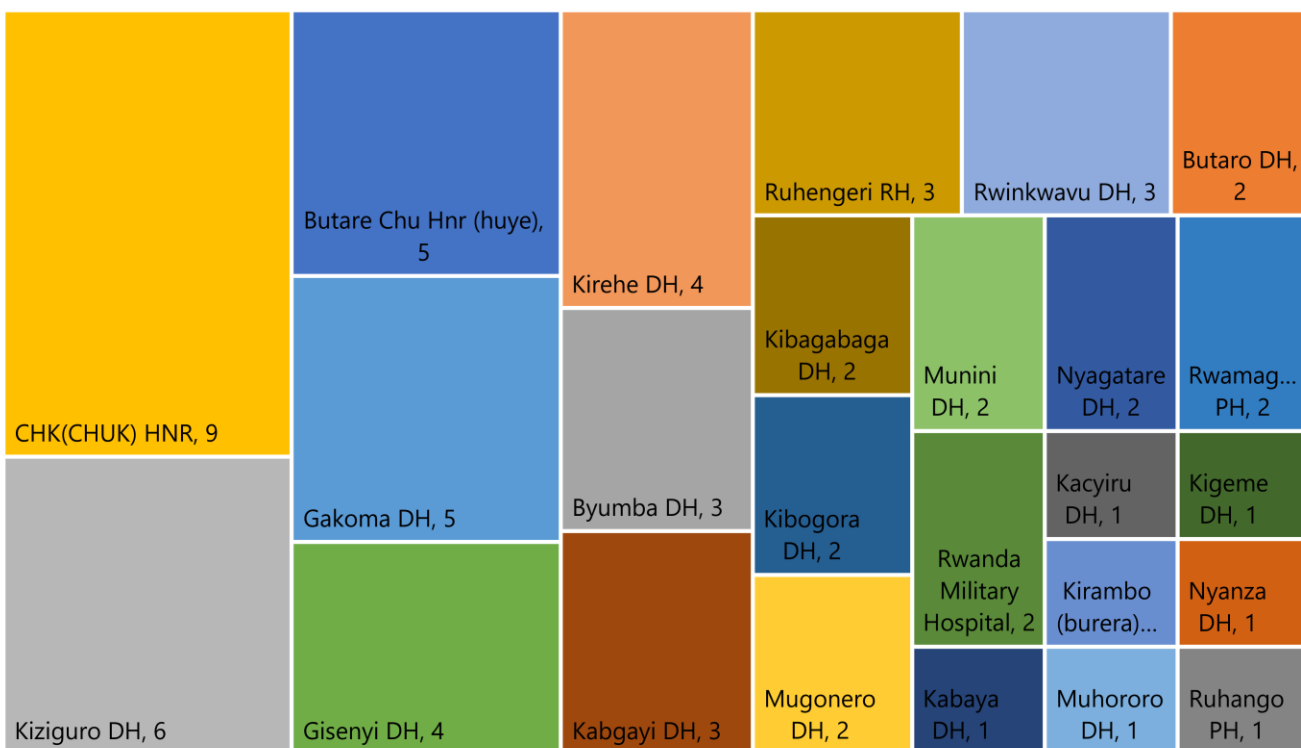


Cause of deaths declared in epi week 43

Deaths were reported from various catchment areas as follow:

- 9 deaths were reported by CHUK
- 6 deaths were reported by Kiziguro DH
- 5 deaths were reported respectively by CHUB and Gakoma DH
- 4 deaths were reported respectively by Gisenyi DH and Kirehe DH
- 3 deaths were reported respectively by Kabgayi DH, Rwinkwavu DH and Ruhengeri RH
- 2 deaths were reported respectively by Butaro DH, Kibagabaga DH, Kibogora DH, Mugonero DH, Munini DH, Nyagatare DH, Rwamagana PH and Rwanda Military Hospital
- 1 was reported respectively by Kabaya DH, Kacyiru DH, Kigeme DH, Muhororo DH, Nyanza DH, Ruhango PH and Kirambo (Burera) HC.

Deaths reported by health facilities in week 43/2023



Distribution of deaths by health facilities in Epi week 43

OUTBREAK AND EVENT UPDATES IN EPIDEMIOLOGICAL WEEK 43

BACILLARY DYSENTERY OUTBREAK IN KARONGI DISTRICT, RWANKUBA SECTOR, NYARUSANGA CELL-KIZIBA REFUGEE CAMP

Confirmed cases	04	Date reported:	September 3, 2023	Risk assessment	Low
Suspected cases	18	Source:	eIDSR		
Death(s)	0	District/HFs:	Kiziba camp/ Kibuye RH		
Total cases	22	Geoscope:	Low		




Outbreak description: Since 03/09/2023, there has been a surge in suspected Shigella infections at Kiziba camp. On 10/10/2023, an outbreak was confirmed with 4 confirmed cases in the camp. Currently, 18 suspect cases have been identified the samples were taken and sent to NRL. For the samples tested in week 42, four results revealed shigella flexineli (3cases) and shigella spp (1case).

Interventions conducted:

- Field investigation was conducted by Kibuye RH and PHSEPR Division Team
- Case management
- Community awareness on water, sanitation and hygiene, appropriate waste disposal and the use of treated water

eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 43

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 43, the overall completeness and timeliness of disease surveillance data reporting in Rwanda was 99% and 98%, respectively. With regards to completeness of surveillance reports, all hospitals had a high completeness (>80%). For the timeliness, the overall score was 98%, and all hospitals had a high timeliness (>80%), this is to be appreciated and to be continuous.

Notes: Details on completeness and timeliness for all health facilities are showed in the figures below.

- 9 -

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		
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	100	93	100	93	93	100	100	100	93	100	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	100		
Ngarama	88	100	100	100	100	100	100	88	100	100	100	100	100	100	100	100	75	100	100	100	100	100	100	100	100	88	100	100	88	100	100	100	100	100	100	100	100	88	88	88	88	100	100	100	
Kiziguro	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	92	100	100	100	100	100	100	100	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	89	100	67	78	100	89	100	89	100	78	100	100	89	100	89	89	89	89	100	89	100	100	
Rwinkwavu	100	88	100	100	100	100	100	100	100	88	88	88	63	75	100	88	100	100	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
Kibungo	94	100	94	100	100	100	100	100	100	100	100	100	94	100	100	100	94	94	100	100	100	100	100	94	100	94	100	100	94	100	94	100	100	100	100	100	100	94	100	94	100	100	100	100	
Kirehe	100	100	100	100	95	95	100	100	100	90	95	100	100	90	100	100	85	95	100	100	100	100	100	95	100	85	100	100	95	95	85	100	100	100	100	100	100	100	100	100	90	100	95	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	100	94	94	100	100	94	100	89	100	100	100	100	94	
Nyamata	100	88	76	94	88	94	94	100	88	100	88	100	94	76	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	
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	88	78	100	89	100	100	100	100	100	100	100	100	100	100	89	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	100	93	93	93	100	100	100	93	100	100	100	100	100	100	100	100	93	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	100	86	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	90	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
Nemba	100	100	89	100	100	89	100	100	100	89	78	100	100	78	100	67	89	89	100	100	89	100	89	89	89	89	89	89	100	100	100	100	100	78	100	100	100	89	100	100	100	100	100	100	100
Ruhengeri	94	89	89	100	83	89	83	72	94	94	78	94	83	89	89	89	89	100	100	94	89	89	100	100	100	89	100	94	89	94	94	100	89	89	100	100	100	94	100	100	100	100	100	94	
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	100	96	96	100	100	100	100	100	100	100	96	100	100	96	100	100	100	100	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	100	100	100	100	100	100	100
Kabutare	84	89	89	95	84	89	89	83	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	89	95	95	95	95	100	100	100	95	89		
Kabgayi	100	92	92	85	92	77	92	85	85	100	92	92	92	69	92	92	69	91	100	100	100	100	100	92	100	92	100	92	100	92	100	92	100	100	100	100	100	100	100	85	92	100	100	100	
Kibizizi	100	100	100	100	100	100	62	100	100	100	82	91	82	91	82	91	82	91	83	83	83	67	100	83	57	100	100	91	100	100	100	100	100	100	100	91	100	100	100	100	100	91	100	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	57	100	83	83	100	100	100	100	100	83	100	83	100	100	100	83	100	100	100	83	100	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	56	89	100	89	100	89	100	89	89	89	100	100	100	100	100	100	100	67	100	100	
Ruhango	88	88	88	100	88	88	75	88	88	88	100	63	75	50	63	60	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	
Remera	100	100	100	93	100	100	100	100	100	93	100	93	93	93	93	100	93	93	93	100	100	93	93	87	100	93	100	93	100	93	100	93	100	93	100	93	100	93	87	93	100	93	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	95	89	100	89	95	89	100	100	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	100	85	100	100	100	100	100	92	100	92	92	100	92	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	100	90	100	100	100	100	100	
Muhini	100	94	100	100	100	94	94	100	94	88	94	100	82	100	100	88	82	82	88	94	88	100	88	100	88	100	100	94	100	94	100	100	100	94	100	100	94	100	100	94	100	100	94	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	
Kibogora	100	100	100	100	100	93	100	100	100	100	100	100	100	100	93	93	86	100	100	93	100	100	100	100	100	93	100	100	93	100	100	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	100	100	100	92	92	100	92	85	100	92	100	100	100	100	100	92	100	92	100	92	100	100	92	92	92	100	85	100	100	100	
Kirinda	100	100	100	100	100	100	100	100	100	100	100	100	83	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	
Mugonero	100	100	100	100	86	100	100	100	100	100	86	100	100	86	100	100	86	100	100	100	86	100	86	86	86	86	100</																		