



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 52 – 2023

(25-31 December 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 52

Event Based Surveillance (EBS) Highlights:

- During the epidemiological week 52, five signals were notified through the electronic Community Event Based Surveillance System (eCEBS): 1 event of human illness, 1 dog bite, 1 event of animal illness or death and 2 human deaths.
- Two alerts were identified through the Epidemic Intelligence from Open Source (EIOS):
 - Zambia records 16 cholera Deaths in a single day
 - 5 persons died of suspect Viral Hemorrhagic fever in WES (South Sudan)

Indicator Based Surveillance (IBS) Highlights:

- 129 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, severe malaria, snake bite and chicken pox.
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for Epi Week 52 revealed that no disease surpassed the epidemic thresholds.
- A total of 44 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 52

Foodborne outbreak in Huye district, Kabutare DH, Rubona HC

Completeness and timeliness

In Epi Week 52, the overall completeness and timeliness of surveillance data reporting in Rwanda was 99% and 84% respectively.

WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 52

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 52, five signals were notified from community through eCBS:

- 1 human illness notified by Murambi village, Kiruhura cell, Umuremera sector, Nyanza district
- 2 human deaths notified by Nyanza and Ngororero district
- 1 animal illness
- 1 dog bite

MEDIA SCAN

- **Zambia records 16 cholera Deaths in a Single Day**

Zambia records 16 cholera deaths and 257 new cases in the last 24 hours. According to the Ministry of Health National Cholera update, the cumulative deaths of cholera were 128, while cases were 3,757, as reported on 3rd January 2024.

<https://diggers.news/local/2024/01/03/zambia-records-16-cholera-deaths-in-a-single-day/>.

- **5 dies of suspect Viral Hemorrhagic fever in WES (South Sudan)**

The National Ministry of Health deployed a rapid response team to investigate a suspected outbreak of VHF in Western Equatoria, as 5 people have so far died. In the situation report of 1st January 2024 the MOH and WHO said that 10 suspected cases of VHF were reported in 3 counties of the state, the cumulative number of deaths was five.

<https://www.eyeradio.org/5-die-of-suspected-viral-hemorrhagic-fever-in-wes-moh-dispatches-probe-team/>.

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 52

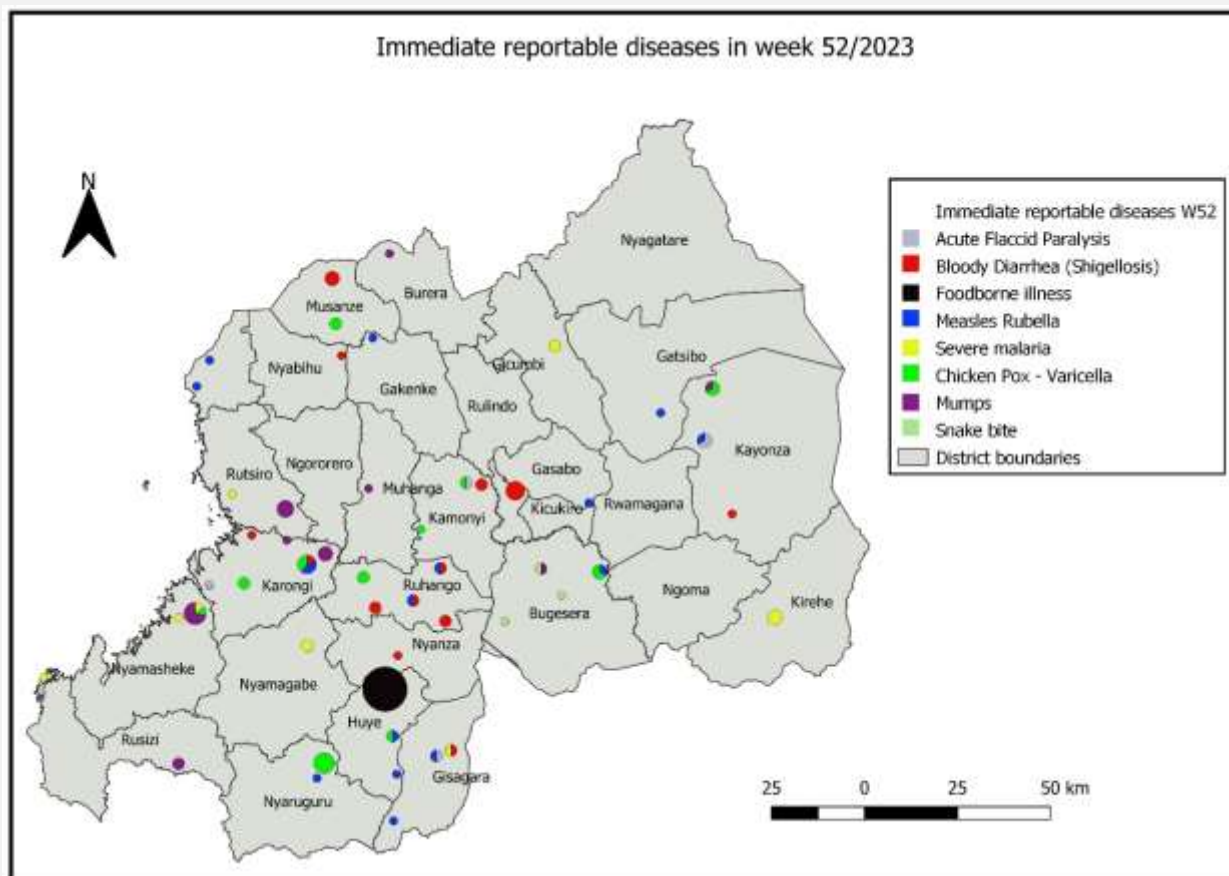
During this Epi week, 129 cases of immediate reportable diseases were notified:

- 23 cases of chicken pox were reported by 12 HFs. No HF crossed the threshold.
- 19 cases of mumps were reported by 9 HCs. No HF crossed the threshold.
- 22 suspected cases of bloody diarrhea (Shigellosis) were reported by 13 health facilities. For samples sent to NRL in the previous week 51, results are still pending.
- 17 suspected cases of Measles/Rubella were reported by 16 HCs. For the samples that were previously sent to NRL, 3 cases were positive on measles, including 2 from Gisenyi DH, 1 from Buyoga HC in Kinyihira PH, while 1 from Bigogwe HC in Shyira DH was tested positive for rubella.
- 12 cases of severe malaria were reported by 8 health facilities, including Byumba DH, Nemba DH, Rutongo DH, Rwinkwavu DH and Kageyo I (Kayonza in Gahini DH).
- 5 cases of acute flaccid paralysis were reported by 4 health facilities: Mugonero DH, Gahini HC, Gisagara HC (Kibilizi DH) and Remera Rukoma HC.
- 28 cases of foodborne illnesses were reported in Rubona HC (Kabutare DH)
- 3 cases of snake bite were reported by 3 HCs located in Nyamata DH: Gihinga HC, Nyamata HC and Mayange HC.

Notes:

- For the diseases whose cases crossed the thresholds, District Hospitals are recommended to strengthen surveillance, investigate and reinforce control measures accordingly. Concerned hospitals include: Byumba DH, Nemba DH, Rutongo DH, Rwinkwavu DH and Kageyo I (Kayonza in Gahini DH), Mugonero DH, Gahini DH, Kibilizi DH, Kabutare DH and Remera Rukoma DH.
- All confirmed cases and suspected cases had been managed at the health facility level.

Geographical distribution of cases:



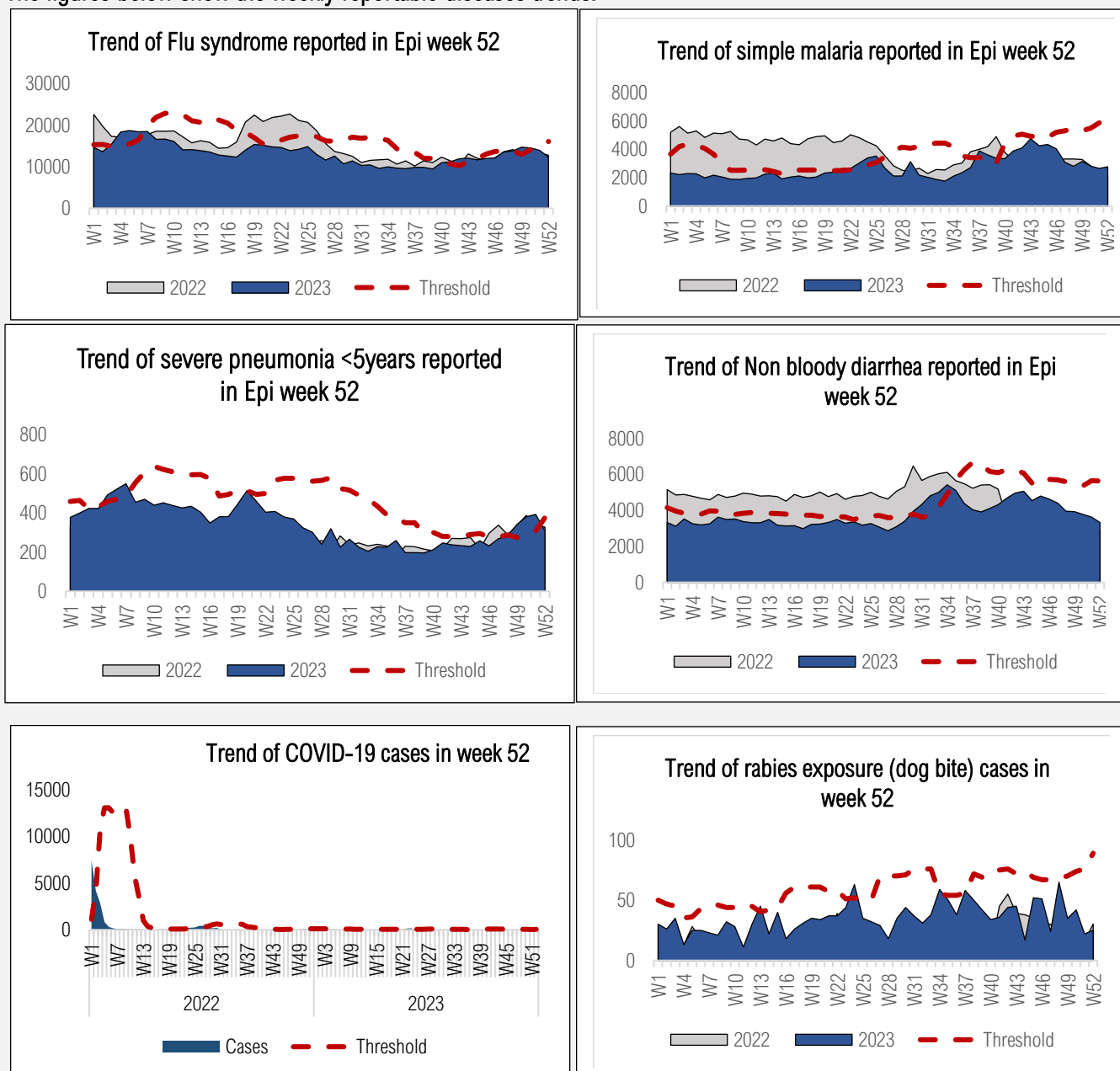
Distribution of immediate reportable diseases in Epi week 52

B. WEEKLY REPORTABLE DISEASES – EPI WEEK 52

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.

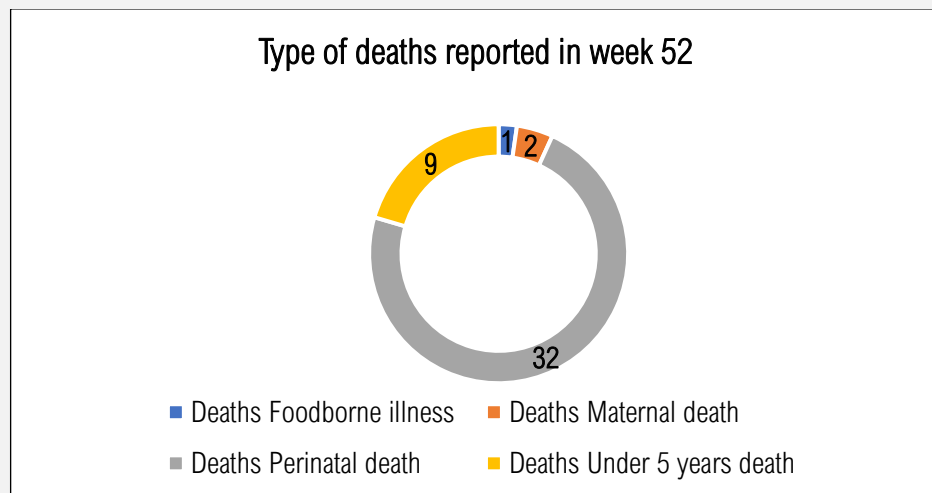
In Epi Week 52, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to their respective epidemic thresholds. The results of the analysis revealed that no disease surpassed the epidemic threshold.

The figures below show the weekly reportable diseases trends:



C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 52

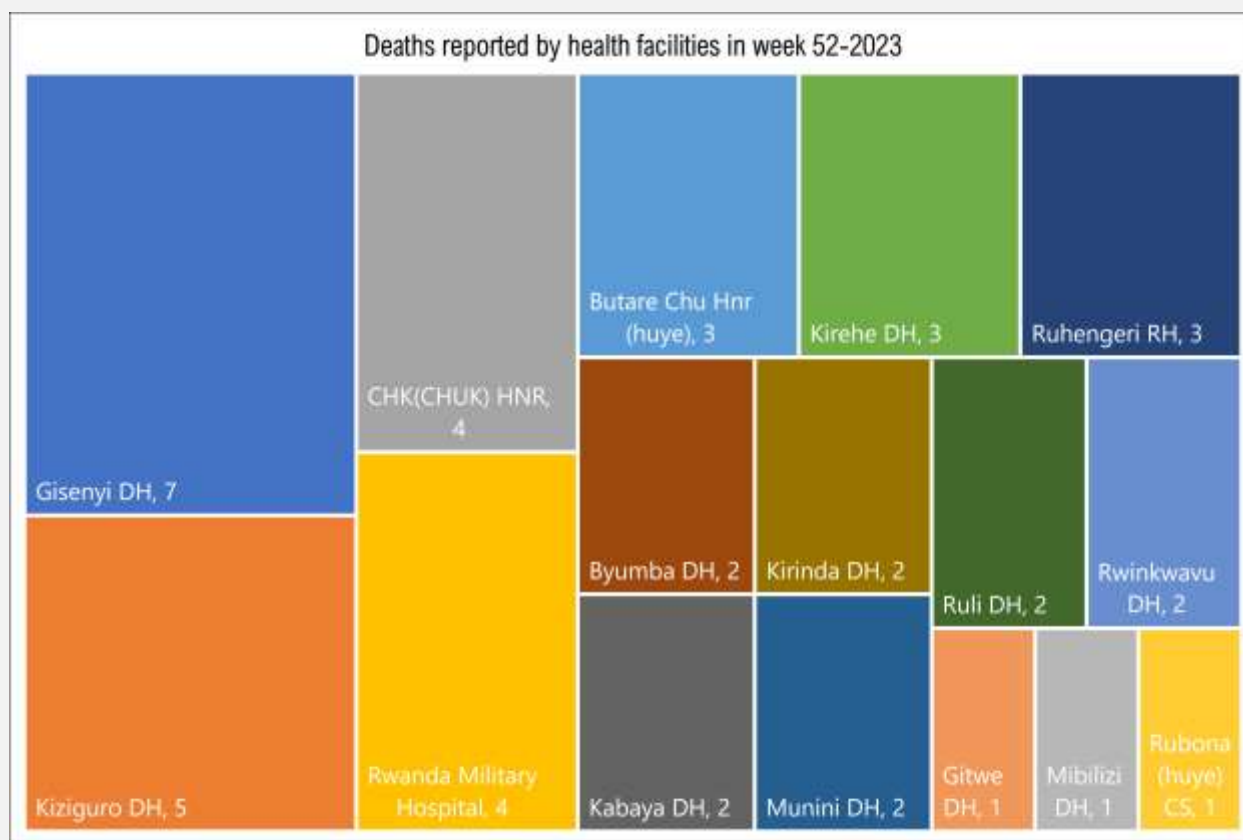
As summarized in the Pie Chart below, a total number of 44 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 32 (73%) were perinatal, 9 (20%) were deaths of children under 5 years old, 2 (5%) maternal deaths and 1 (2%) death due to suspected foodborne illness.



Cause of deaths declared in epi week 52

44 deaths were reported from various catchment areas as follow:

- 7 deaths were reported by Gisenyi DH, all were perinatal deaths
- 5 deaths were reported Kiziguro DH, all were perinatal deaths
- 4 deaths were reported respectively by CHUK (2 perinatal deaths, 2 under 5 years deaths) and Rwanda Military Hospital (2 perinatal deaths, 1 under 5 years death, and 1 maternal death)
- 3 deaths were reported respectively by CHUB (3 perinatal deaths), Ruhengeri RH (2 perinatal deaths, 1 under 5 years death) and Kirehe DH (1 perinatal deaths, 2 under 5 years deaths)
- 2 were reported respectively by Byumba DH (2 perinatal deaths), Kabaya DH (2 under 5 years deaths), Kirinda DH (1 maternal and 1 perinatal deaths), Munini DH (1 perinatal death, 1 under 5 years death), Ruli DH (2 perinatal deaths) and Rwinkwavu DH (2 perinatal deaths)
- 1 death was reported respectively by Gitwe DH (it was perinatal death), Mibilizi DH (it was perinatal death), Rubona HC/Kabutare DH (due to suspected foodborne illness)



Distribution of deaths by health facilities in Epi week 52

OUTBREAK AND EVENT UPDATES IN EPIDEMIOLOGICAL WEEK 52

FOODBORNE OUTBREAK IN HUYE DISTRICT

Confirmed cases	0	Date reported:	December 25, 2023	Risk assessment	Low
Suspected cases	27	Source:	eIDSR		
Death(s)	1	District/HFs:	Rubona HC/ Kabutare DH		
Total cases	27	Geoscope:	Low		

Outbreak description:

On 25th December 2023, 27 people (17 females and 10 males), sought consultation at Rubona Health Center in Huye district. These patients presented with symptoms such as headache, fever, watery diarrhea, vomiting, and abdominal pain. The symptoms manifested after the consumption of cow-meat, fried Irish potatoes, rice, vegetables, beans, and a soft drink (FANTA) during a Christmas celebration event on 23/12/2023.




Unfortunately, one child died at home due to the illness, another was transferred to Kabutare District Hospital, and a third was transferred to CHUB. The remaining patients were treated at Rubona Health Center.

Interventions conducted:

- Case management
- Case notification via IDSR system

eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 52

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 52, the overall completeness and timeliness of disease surveillance data reporting in Rwanda was 99% and 84%, respectively. With regards to completeness of surveillance reports, all hospitals had a high completeness (>80%). However, for the timeliness, 6 hospitals had a moderate score (Kibagabaga DH, Gatunda DH, Rwinkwavu DH, Butaro DH, Nyanza DH and Remera Rukoma) and 8 hospitals had a low timeliness score (Gahini DH, Kabgayi DH, Kabutare DH, Kabaya DH, Muhima DH, Nyarugenge DH, Rwanda Military Hospital and King Faysal Hospital).

Notes: The health facility that did not have a high score for 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																																																								
Hospital catchment area	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	W46	W47	W48	W49	W50	W51	W52				
Nyagatare	100	100	100	100	100	86	93	93	100	93	100	100	86	93	100	100	100	94	86	100	86	100	100	100	100	93	100	100	100	100	100	100	93	100	100	93	100	100	100	100	100	100	86	100	100	100	100	93	100	100	100	93				
Gatunda	100	100	100	100	100	100	100	100	100	78	100	100	89	100	100	100	100	100	100	100	100	100	100	100	100	100	89	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			
Ngarara	88	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	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100				
Koiguro	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	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100			
Gahini	100	100	100	100	100	100	89	89	78	100	100	78	100	100	100	100	100	78	100	100	100	100	100	100	100	89	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		
Rwinkwavu	100	100	100	100	100	100	100	100	100	100	100	100	88	100	88	88	88	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	100	100	100		
Kibungo	94	100	94	100	100	100	100	100	100	100	100	100	94	100	100	100	100	94	100	100	100	100	100	100	94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	94	100	100	100	100	100	100	100	100	100	100	100	100			
Kirehe	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	100	100	100	100	100	100	100	100	100	95	100	95	100	100	100	95	100	100	100	100	100	95			
Rwamagana	76	71	88	100	100	94	100	100	94	100	88	94	100	100	100	100	100	94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100			
Nyamata	100	94	100	94	100	100	100	100	100	100	100	100	100	100	100	88	88	100	94	100	94	100	100	100	88	88	88	94	100	100	88	88	94	100	100	100	100	100	100	100	100	100	100	100	100	100	94	100	100	100	100	100	100			
Kinshira	100	100	100	100	100	100	89	89	89	100	89	89	100	89	89	89	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	100	100	100	100		
Rutoro	93	87	93	87	100	100	100	100	100	100	93	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	100	100	100	100	100	100	100			
Gatonde	100	86	100	100	100	100	100	100	100	86	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	100	100	100	100	100	100	100	100	100			
Butaro	80	85	95	95	75	90	95	95	95	100	95	100	95	100	95	100	95	100	95	100	90	100	100	100	100	95	75	100	100	100	100	100	85	95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	90	90	90	95
Ruli	100	100	100	100	100	100	100	100	100	100	100	90	90	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	100	100	100	100	100	100	100		
Nemba	100	100	100	100	100	100	89	100	100	100	89	100	100	100	100	100	89	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	100	100	100		
Ruhengeri	94	94	94	100	83	89	89	89	100	94	94	83	94	89	94	89	94	94	100	100	89	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		
Byumba	96	100	100	96	96	96	100	100	100	96	100	96	96	96	92	100	100	96	100	96	100	100	96	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		
CHUB	8	100	100	100	100	100	100	100	8	8	100	100	8	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	100	100	100	100	100	100	100		
Kabutare	84	95	100	100	95	95	95	95	89	95	95	100	100	89	100	100	89	95	100	100	100	100	100	89	100	100	89	100	100	100	100	100	95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Kabagayi	100	100	92	85	100	92	92	92	100	100	92	92	85	100	100	92	100	100	100	100	92	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	
Kibizi	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	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Gakoma	83	100	100	100	83	100	100	100	83	100	100	100	67	100	100	100	83	83	67	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</						

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