



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 48 – 2023

(27 November -3 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.

Authors: Public Health Surveillance & Emergency Preparedness and Response Division

KEY EPIDEMIOLOGICAL HIGHLIGHTS

EPIDEMIOLOGICAL WEEK 48

Event Based Surveillance (EBS) Highlights:

- During the epidemiological week 48, no event notified through the electronic Community Event Based Surveillance System (eCEBS).
- Two alerts were identified through the Epidemic Intelligence from Open Source (EIOS):
 - Could street pneumonia in China become a pandemic?
<https://www.hidrocalidodigital.com/neumonia-ambulante-en-china-podria-convertirse-en-pandemia/>
 - Swine flu: What's next after first confirmed case in UK?
<https://www.bbc.com/news/health-67576300>

Indicator Based Surveillance (IBS) Highlights:

- 297 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, 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 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 and events updates in week 48

- One ongoing outbreak:
 - Rubella outbreak in Karongi District, Kiziba Refugee Camp
 - Cholera outbreak in Nyamasheke District, Kibogora district hospital, Kanjongo Sector, Kibogora Cell, Kabuyaga and Nyarusange villages.
- New outbreak: none

Completeness and timeliness

In Epi Week 48, 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 48

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 48, no event was notified from community to eCBS

MEDIA SCAN

Two alerts from EIOS:

1. Could street pneumonia in China become a pandemic?

The recent day the increase in cases of child pneumonia, or street, was reported in hospitals in China. The news alerted the health authorities, due to the coronavirus. Faced with uncertainty, health specialists have given themselves the task of clarifying whether the agent who causes it could trigger a pandemic worldwide. Especially because he mainly attacks children. In this way, Dr. Alejandro Macias, also known as the Influenza Size, explained on his YouTube channel the risks of the disease and what preventive measures to take in the face of the unexpected outbreak. According to the Chinese authorities' explanation, street pneumonia is not a new disease and therefore could not trigger a pandemic. In fact, it would be a condition caused by mycoplasma, that is, bacteria. Another observation made by China's health sector was that this season there are increasing cases of influenza, coronavirus, respiratory syncytial viruses and mycoplasma, which can make the population believe that pneumonia is expanding.

What to do in the face of the street pneumonia outbreak?

While it has so far been argued that street pneumonia would not cause a pandemic, Dr. Macias warned that at any time another crisis such as that generated by coronavirus may occur. A pandemic can happen at any time and we have to learn the lessons of the previous pandemics. The truth is that if this were a new pandemic, it will take us very poorly prepared, the Tsar stressed.

<https://www.hidrocalidodigital.com/neumonia-ambulante-en-china-podria-convertirse-en-pandemia/>

2. Swine flu: What's next after first confirmed case in UK?

Earlier this week, UK health officials confirmed a person in North Yorkshire had been infected by a new genetic strain of flu that's similar to one pigs get. The government agency in charge of protecting public health - the UKHSA - has now shared the full timeline of how events unfolded. It begins on Thursday 9 November, with a trip to see a GP. But the person seeking help will have caught it days before that. It takes about one to four days for symptoms to emerge. The patient went to their doctor complaining of "typical" flu symptoms, meaning they were probably feeling exhausted, with a temperature, cough and sore throat. It is still a mystery how they caught it, they have since confirmed that they do not work with pigs or keep any as pets. During the visit, the GP did a swab test. So, the experts in a UKHSA lab discovered it was a new virus.

Officials are calling it influenza A(H1N2)v rather than swine flu. It is a type of flu – like the winter illness many people get vaccinated against – but it is a bit different. It is almost identical to one circulating in pigs in the UK at the moment, rather than the type humans normally get. Pigs can sometimes spread flu viruses to people, but that is rare. It is usually the other way round.

Prof Isabel Oliver said that while there may have been some limited spread between people, that is entirely different to a big outbreak. "So far this is the only confirmed case. We are working to understand how this person acquired the infection. We have not identified a source of infection but our investigations continue," she said.

<https://www.bbc.com/news/health-67576300>

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 48

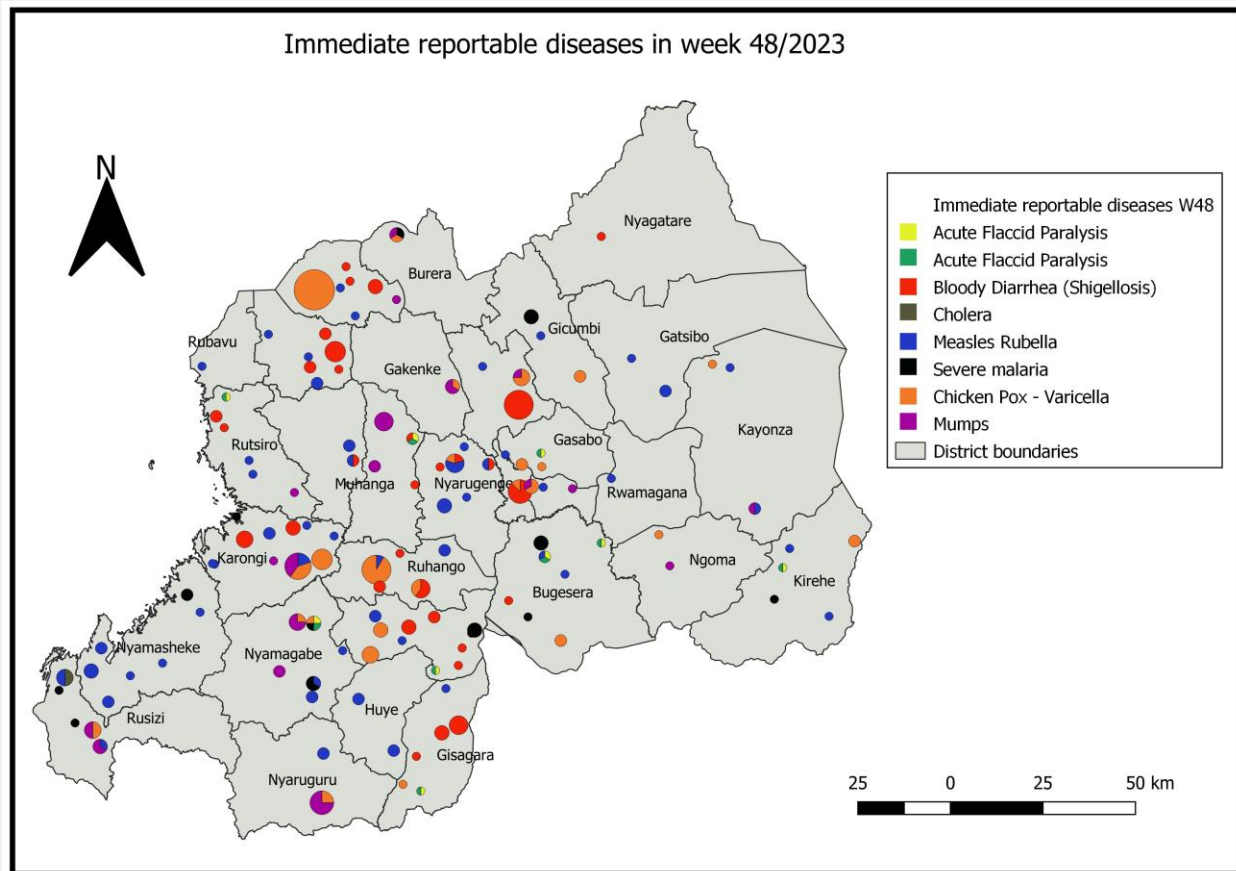
During this Epi week, 297 cases of immediate reportable diseases were notified:

- 80 cases of chicken pox were reported by 25 HFs. Kabere HC (in Ruhengeri RH) and Muyunzwe HC (in Gitwe DH) crossed the threshold.
- 37 cases of mumps were reported by 18 HCs. No HC crossed the threshold.
- 75 suspected cases of bloody diarrhea (Shigellosis) were reported by 31 health facilities. For samples sent to NRL in the previous week 47, no one tested positive for shigella dysenteriae.
- 73 suspected cases of Measles/Rubella were reported by 51 HCs, the samples were taken and sent to NRL, results are pending.
- 21 cases of severe malaria were reported by 13 health facilities, including Byumba DH, Gakoma DH, Gihundwe DH, Kaduha DH, Kibuye RH, Kigeme DH, Kirehe DH, Mibilizi DH, Nyamata DH, Ruhuha HC (in Nyamata DH), Karengera HC (Kibogora DH), Cyanika(Burera) HC(in Butaro DH),Gakoma HC (Gakoma DH).
- 9 cases of acute flaccid paralysis were reported by 9 health facilities: Gikore HC, Juru HC, Kaduha DH, Kagugu HC, Kivumu(Rutsiro) HC, Mushikiri HC, Nyabikenke HC, Nyamata HC, Ruyenzi HC
- 2 cases of suspected cholera case were reported by Nkanka HC in Gihundwe DH, the samples were sent to NRL and results did not show vibrio cholerae.

Notes:

- For the diseases whose cases crossed the thresholds, District Hospitals are recommended to investigate, including: Ruhengeri RH, Gitwe DH, Byumba DH, Gakoma DH, Gihundwe DH, Kaduha DH, Kibuye RH, Kigeme DH, Kirehe DH, Mibilizi DH, Nyamata DH, Kibogora DH, Butaro DH , Gakoma DH, Kibagabaga DH, Nyanza DH, Kibilizi DH, Kabgayi DH, Murunda DH and Gihundwe DH.
- All confirmed cases and suspected cases had been managed at the health facility level.

Geographical distribution of cases:



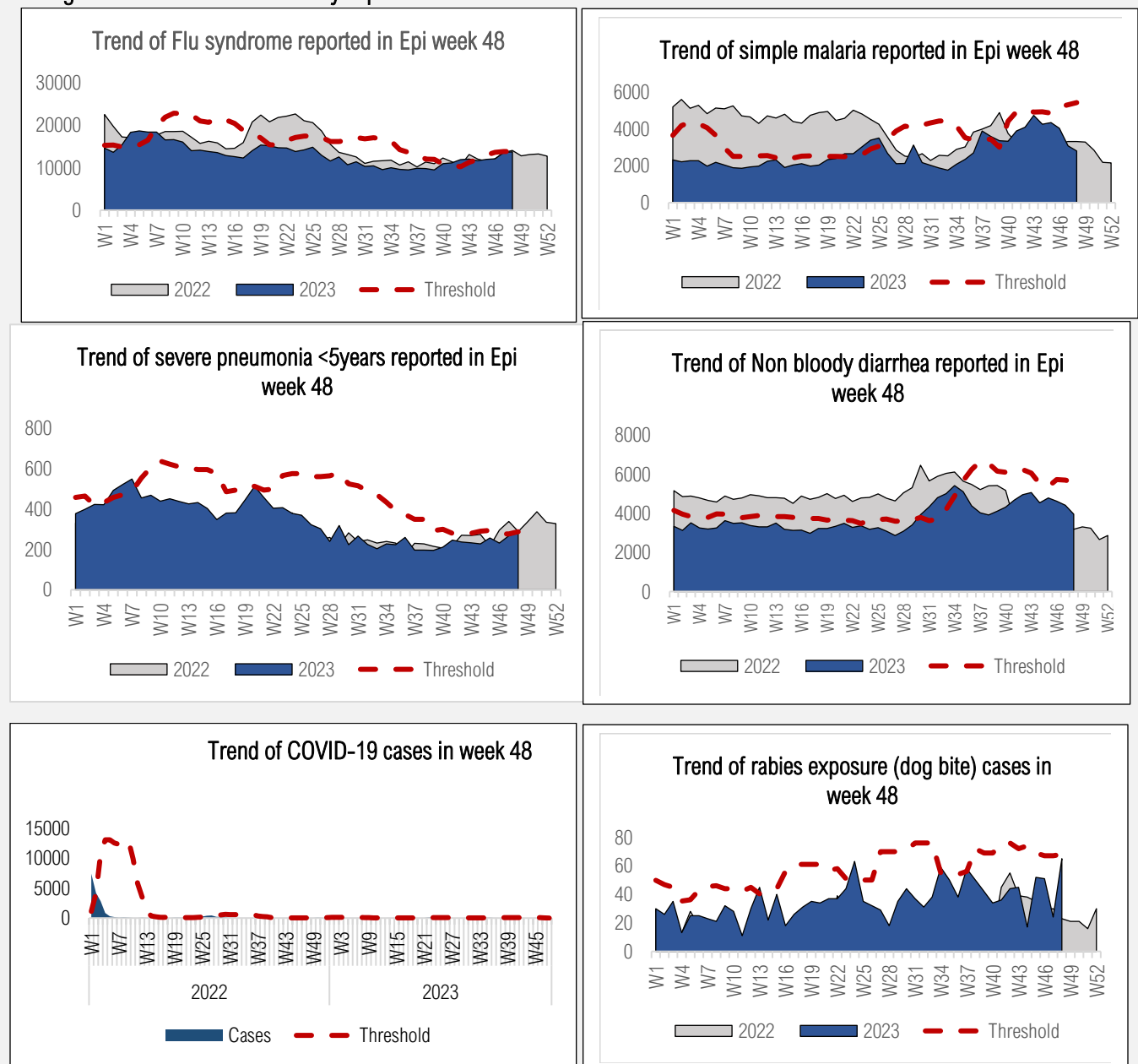
Distribution of immediate reportable diseases in Epi week 48

B. WEEKLY REPORTABLE DISEASES – EPI WEEK 48

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.

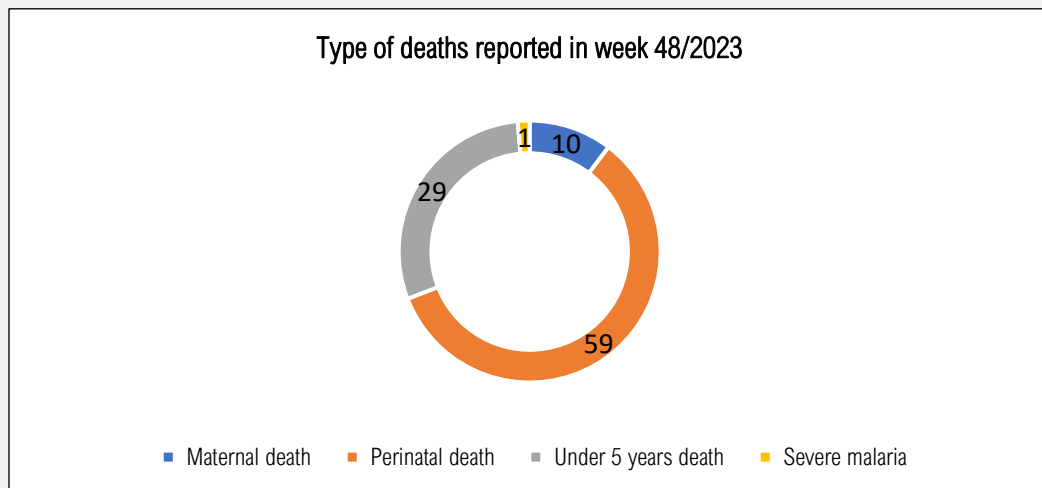
In Epi Week 48, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to their respective epidemic thresholds. The results of the analysis revealed that no disease surpassed the epidemic threshold. However, there was an increase in cases that inspire to enhance the surveillance in the following DHs catchment areas, for severe pneumonia of under 5 years children: Kirehe DH, Kibagabaga DH, Muhima DH, Nyarugenge DH, Gisenyi DH, Kabaya DH and Murunda DH. For the flu syndrome cases, the cases were increased in the following hospital catchment areas: Kirehe, Nyamata, Rwamagana, Kibagabaga, Butaro, Ruhengeri, Kibirizi, Nyanza, Gisenyi, Murunda and Shyira.

The figures below show the weekly reportable diseases trends:



C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 48

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, 40 (59%) were perinatal, 20 (29%) were deaths of children under 5 years old, 7 (10%) maternal deaths, and 1 (1%) death due to severe malaria.

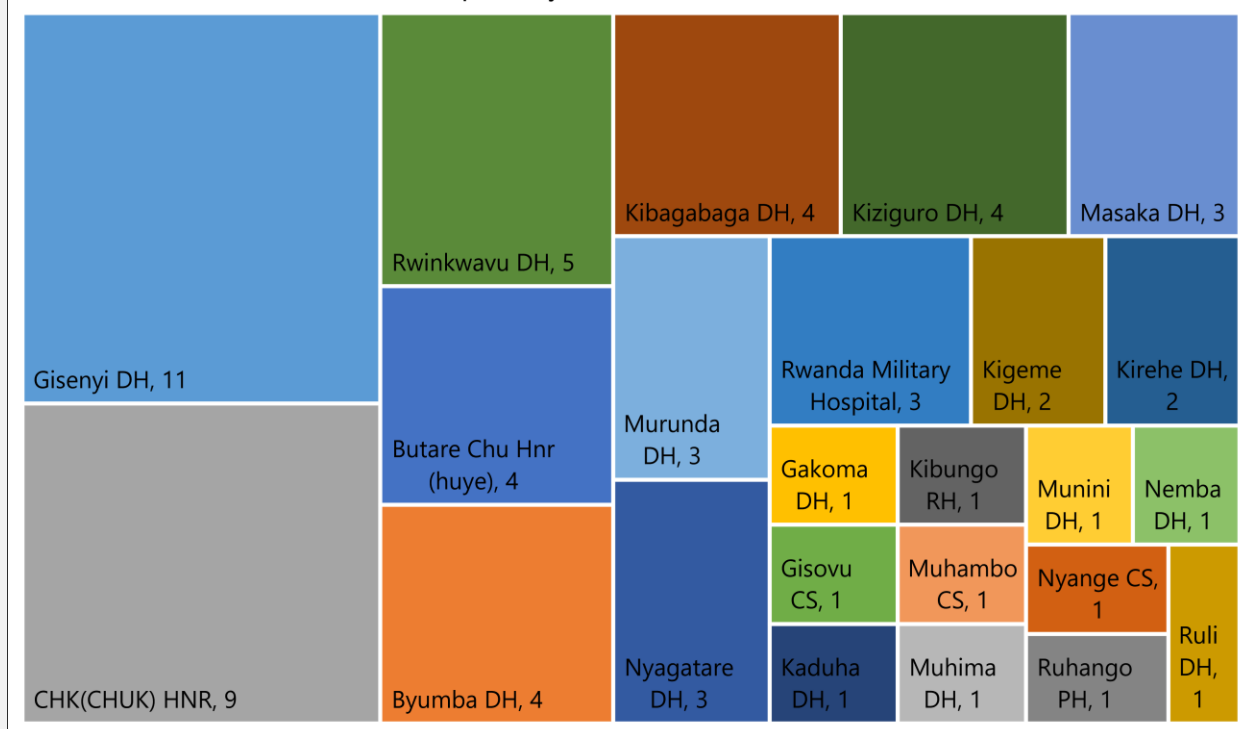


Cause of deaths declared in epi week 48

Deaths were reported from various catchment areas as follow:

- 11 deaths were reported by Gisenyi DH
- 9 deaths were reported by CHUK
- 5 deaths were reported by Rwinkwavu DH
- 4 deaths were reported respectively by Kibagabaga DH, Kiziguro DH, Byumba DH and CHUB
- 3 deaths were reported by Masaka DH, Murunda DH, Nyagatare DH and Rwanda Military Hospital
- 2 deaths were reported respectively by Kigeme DH and Kirehe DH
- 1 death was reported respectively by Kaduha DH, Gakoma DH, Kibungo RH, Muhima DH, Munini DH, Nemba DH, Ruhango PH, Ruli DH, Gisovu HC, Muhambo HC and Nyange HC.

Deaths reported by health facilities in week 48/2023



Distribution of deaths by health facilities in Epi week 48

OUTBREAK AND EVENT UPDATES IN EPIDEMIOLOGICAL WEEK 47

1. ONGOING RUBELLA OUTBREAK IN KIZIBA REFUGEE CAMP IN KARONGI DISTRICT

Confirmed cases	05	Date reported:	October 18, 2023	Risk assessment	Low
Suspected cases	23	Source:	eIDSR		
Death(s)	0	District/HFs:	Kiziba camp/ Kibuye RH		
Total cases	28	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 3 additional cases tested positive on Rubella which makes it a total of 5 cases. In the previous week, no suspected case reported.

Interventions conducted:

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

2. CHOLERA OUTBREAK IN NYAMASHEKE DISTRICT- KIBOGORA DISTRICT HOSPITAL CATCHMENT AREA

Confirmed cases	03	Date reported:	October 20, 2023	Risk assessment	Low
Suspected cases	06	Source:	eIDSR		
Death(s)	0	District/HFs:	Kibogora DH		
Total cases	09	Geoscope:	Low		

Outbreak description:

From 20/10/2023, a total of 5 suspect cases of Cholera were identified, samples were collected, and 3 cases were tested positive. These cases are distributed in Kanjongo Sector, Kibogora Cell, Kabuyaga and Nyarusange villages. In the previous week, 1 suspected case was identified, sample was taken, and result is pending.

Interventions conducted:

- Case management of patients
- Community awareness on WASH practices
- RBC team was deployed this week for field investigation.

eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 48

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

Notes: The health facility 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 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	
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	100	93	100	100	100	100	100	100	86	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
Ngarama	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	
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	100	92	100	100	100	100	100	100	100	100	100	100	100	100	100	100	92	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	89	100	100	89	100	100	100	100	100	100	100	100	100	100	100	100
Rwinkwavu	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	88	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	94	100	100	100	100	100	100	100	100	100	94	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	95	95	100	100	100	100	100	100	100	95	100	95	100	100	95	100	100		
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		
Nyamata	100	94	100	94	100	100	100	100	100	100	100	100	100	100	100	100	88	88	100	94	100	94	100	100	88	88	88	94	100	100	88	100	88	94	100	88	94	100	100	100	100	100	100	100	94	100	100		
Kinhiira	100	100	100	100	100	100	89	89	100	89	89	100	89	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	
Rutongo	93	87	93	87	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	93	100	93	100	100		
Galonde	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		
Butaro	80	85	95	95	75	90	95	95	95	100	95	100	95	100	100	95	100	95	100	90	100	100	100	100	100	95	75	100	100	100	100	85	95	100	100	100	100	100	100	100	100	100	100	100	100	90			
Ruli	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	
Nemba	100	100	100	100	100	89	100	100	100	89	100	100	89	100	100	100	89	100	100	89	100	100	89	100	100	89	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	90	100	100	90	
Ruhengeri	94	94	94	100	83	89	89	89	100	94	94	83	94	89	94	89	94	94	100	89	100	100	100	100	100	100	100	100	100	100	94	100	100	94	89	100	100	100	100	100	100	100	94	100	100	94			
Byumba	96	100	100	96	96	96	100	100	100	96	100	96	96	92	100	100	100	96	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		
CHUB	0	100	100	100	100	100	100	100	0	0	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	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	89	100	100	89	95	100	100	100	100	100	89	100	100	89	100	100	100	95	100	100	100	95	95	95	100	100	100	100	100	100	100	95	89	100	100		
Kabagayi	100	100	92	85	100	92	92	92	92	100	100	92	92	85	100	100	92	100	100	100	92	100	100	100	92	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	92	100	100		
Kibizi	100	100	100	100	100	100	100	100	100	100	100	82	91	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	91	100	100	100	100	100	100	100	91	100	100	100		
Gakoma	83	100	100	100	83	100	100	83	100	100	100	100	67	100	100	100	83	83	67	100	100	100	100	100	100	100	83	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	83	100	100	100	100		
Gilwe	100	100	89	100	100	78	100	100	100	100	100	100	100	89	100	100	78	89	100	100	89	100	89	100	100	67	100	100	100	100	100	100	89	100	100	100	100	100	100	100	100	100	67	100	100	100	100		
Ruhango	88	100	100	100	88	88	75	88	88	100	100	63	75	63	63	75	80	88	75	63	88	63	100	100	100	75	100	100	88	88	100	75	88	100	100	100	100	100	100	100	88	100	100	100	88	100			
Remera	100	100	100	93	100	100	100	100	100	100	100	100	93	100	100	100	100	93	100	100	93	93	93	100	100	100	100	100	100	93	100	100	100	100	100	100	100	100											

- 11 -