



WEEKLY EPIDEMIOLOGICAL BULLETIN

WEEK 50 – 2023

(11-17 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 50

Event Based Surveillance (EBS) Highlights:

- During the epidemiological week 50, one human death was notified through the electronic Community Event Based Surveillance System (eCEBS).
- Two alerts were identified through the Epidemic Intelligence from Open Source (EIOS):
 - Deadly monkeypox strain kills an alarming 1 in 10 people, CDC warns.
 - Uganda bans beef products due to anthrax outbreak

Indicator Based Surveillance (IBS) Highlights:

- 206 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, human rabies, severe malaria, bacterial meningitis and chicken pox.
- For 8 weekly reportable diseases and health events, a thorough analysis conducted for Epi Week 50 revealed that flu syndrome and severe pneumonia for under 5 years surpassed the epidemic thresholds.
- A total of 71 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 50

No outbreak occurred.

Completeness and timeliness

In Epi Week 50, the overall completeness and timeliness of surveillance data reporting in Rwanda was 99% and 96% respectively.

WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 50

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 50, one human death was notified from community to eCBS:

- 1 death from Rusizi district

MEDIA SCAN

Two alerts from EIOS:

1. Deadly monkeypox strain kills an alarming 1 in 10 people, CDC warns.

A deadly, fast-spreading strain of the monkeypox virus has the Centers for Disease Control and Prevention on high alert. The variant of the virus, which causes the severe disease known as mpox, kills up to 10% of the people who are infected, according to the World Health Organization. “The virus variant is known to be more virulent. If it adapts better to human-to-human transmission, that presents a risk,” Rosamund Lewis of the WHO’s mpox surveillance team told Reuters.

Last year, a less-deadly variant of the monkeypox virus known as Clade II spread worldwide (a clade is a genetic subtype of virus). More than 31,000 Americans were diagnosed with mpox during last year’s outbreak, and 55 died. But now, the rapid spread of the deadlier Clade I subtype of the virus has been reported by health officials in the Democratic Republic of Congo, where the disease has spread to 22 of the DRC’s 26 provinces. So far, there are no reported cases of the Clade I monkeypox virus in the US, but the CDC is warning doctors to be on the lookout for any symptoms of the disease, which can spread through sexual or household contact, or in health care settings where bodily fluids are present. The CDC has issued an alert over a virulent strain of monkeypox that’s now spreading rapidly. The CDC is warning doctors to consider mpox when evaluating the cause of rashes. The disease can affect anyone, though sexual contact — especially among men who have sex with men — has been cited as the most common way of spreading mpox. Severe cases and death can occur, with young children and people with weak immune systems more at risk of severe disease.

<https://nypost.com/2023/12/08/lifestyle/deadly-monkeypox-strain-that-kills-1-in-10-raises-cdc-alarm/>

2. Uganda bans beef products due to anthrax outbreak

Selling beef in Uganda is not allowed. This is because there is an outbreak of anthrax in Kyotera district and the government wants to prevent it from spreading to other areas. At least 17 people have died and more than 20 others are very sick in various villages, according to local news.

John Mary Lutaaya, who is in charge of taking care of animals in Kyotera district, said that the people who sell animals in the small area of Kabira cannot take their cows anywhere else until the disease is under control. Over 40 cows have died in the past two months. The health authorities said the outbreak was real on November 26th. Anthrax is a serious disease caused by a bacteria found in soil. It can affect wild and domestic animals. People can get sick if they touch sick animals or things from sick animals. The symptoms can include blisters, fevers, swollen limbs, and trouble breathing. Some people who have been hurt are going to religious places instead of going to the doctor. Health experts are worried that this will make it harder to stop the outbreak. <https://theindependentghana.com/uganda-bans-beef-products-due-to-anthrax-outbreak/>

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 50

During this Epi week, 206 cases of immediate reportable diseases were notified:

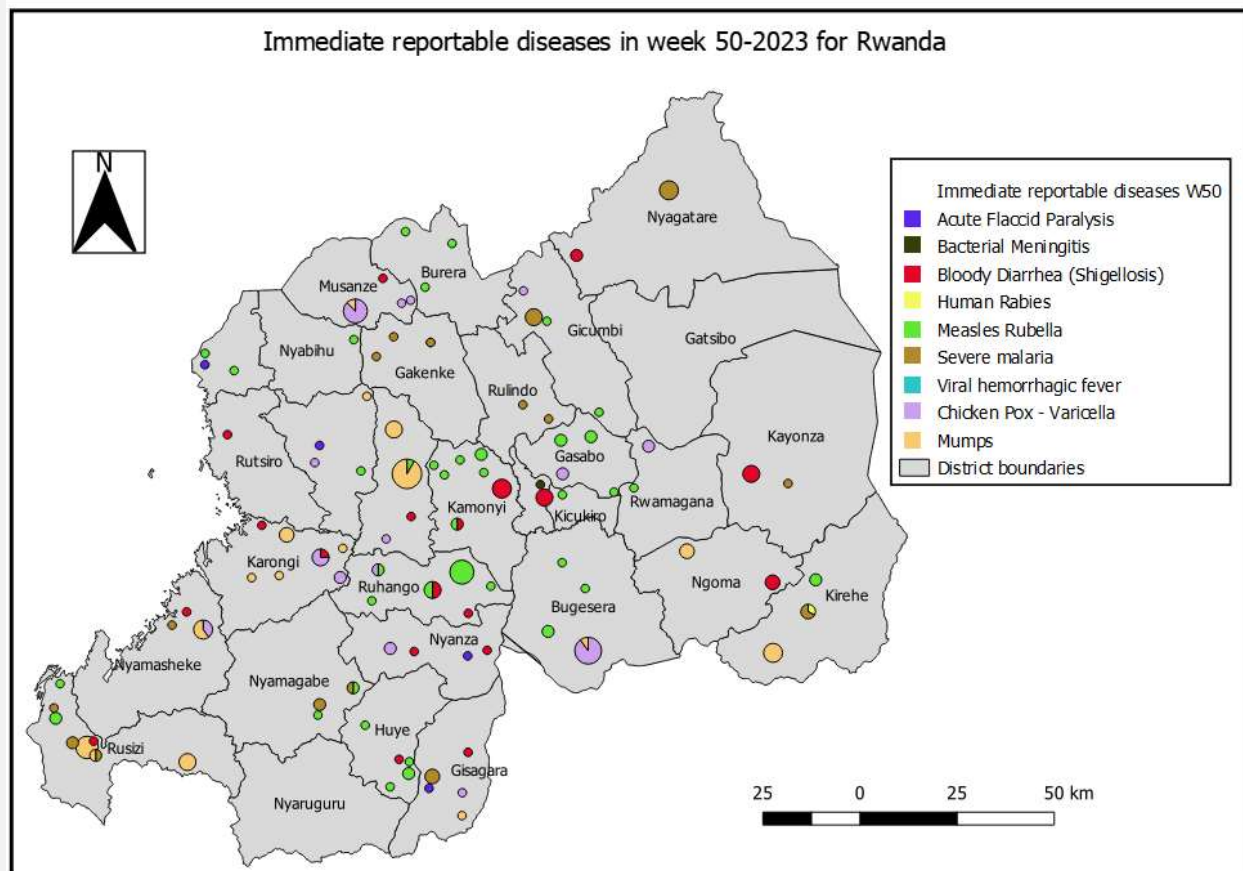
- 37 cases of chicken pox were reported by 16 HFs. No HF crossed the threshold.
- 48 cases of mumps were reported by 16 HCs. Buramba HC (Nyabikenke DH) crossed the threshold.
- 33 suspected cases of bloody diarrhea (Shigellosis) were reported by 19 health facilities. For samples sent to NRL in the previous week 49, no sample was tested positive for shigella dysenteriae.
- 53 suspected cases of Measles/Rubella were reported by 38 HCs, the samples were taken and sent to NRL, results are pending.
- 28 cases of severe malaria were reported by 16 health facilities, including Byumba DH, Gatonde DH, Gihundwe DH, Kibilizi DH, Kigeme DH, Kirehe DH, Mibilizi DH, Nemba DH, Nyagatare DH, Rutongo DH, Rwinkwavu DH, Busengo HC (Gatonde DH), Cyanika HC (Nyamagabe, Kigeme DH), Hanika HC (Nyamasheke, Kibogora DH), Mashasha HC (Mibilizi DH).
- 1 suspected case of bacterial meningitis was reported by CHUK, the sample was sent to laboratory and the result was negative.
- 4 cases of acute flaccid paralysis were reported by 4 health facilities: Gacuba II HC, Kibilizi (Gisagara) HC, Nyamiyaga (Nyanza) HC and Ramba HC.
- 1 case of human rabies was reported by Kirehe DH
- 1 case of suspected VHF was reported in CHUB, the laboratory test result was negative.

Notes:

- For the diseases whose cases crossed the thresholds, District Hospitals are recommended to strengthen surveillance, investigate and reinforce control measures accordingly. Concerned DHs include: Nyabikenke DH, Byumba DH, Gatonde DH, Gihundwe DH, Kibilizi DH, Kigeme DH, Kirehe DH, Mibilizi DH, Nemba DH, Nyagatare DH, Rutongo DH, Rwinkwavu DH, Busengo HC (Gatonde DH), Cyanika HC (Nyamagabe, Kigeme DH), Hanika HC (Nyamasheke, Kibogora DH), Mashasha HC (Mibilizi 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 50

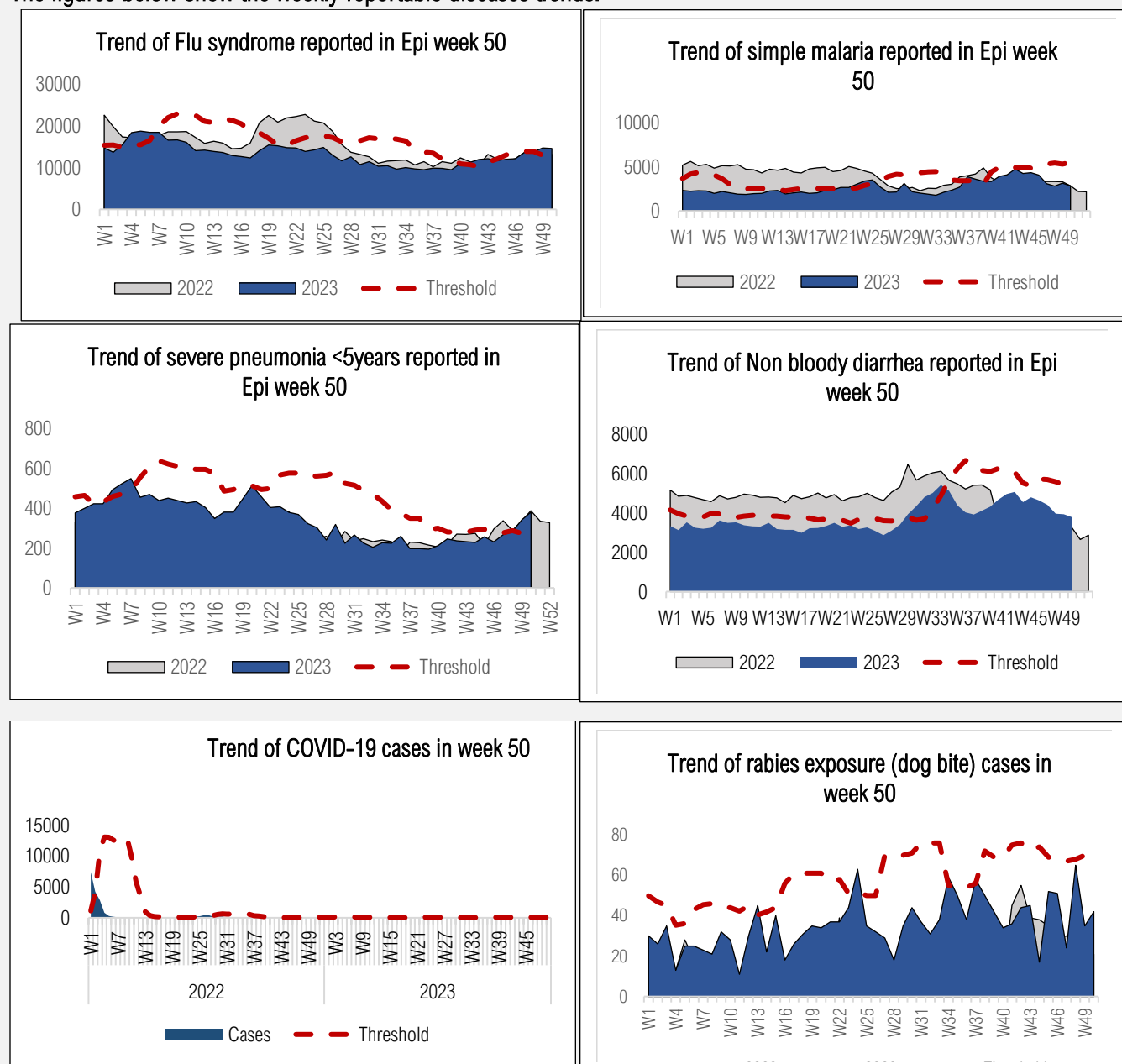
B. WEEKLY REPORTABLE DISEASES – EPI WEEK 50

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 50, 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 severe pneumonia for under 5 years and flu syndrome surpassed the epidemic threshold. The following hospital catchment areas had the cases that surpassed the epidemic threshold for severe pneumonia of under 5 years: Kibogora, Kibuye, Kigeme, Kirehe, Kiziguro, Muhima, Muhororo, Nemba, Ruhango and Rwinkwavu; while for the flu syndrome cases, hospital catchment areas where the epidemic threshold surpassed were: Byumba, Gatunda, Gisenyi, Kabgayi, Masaka, Mibilizi, Muhororo, Nemba and Nyanza.

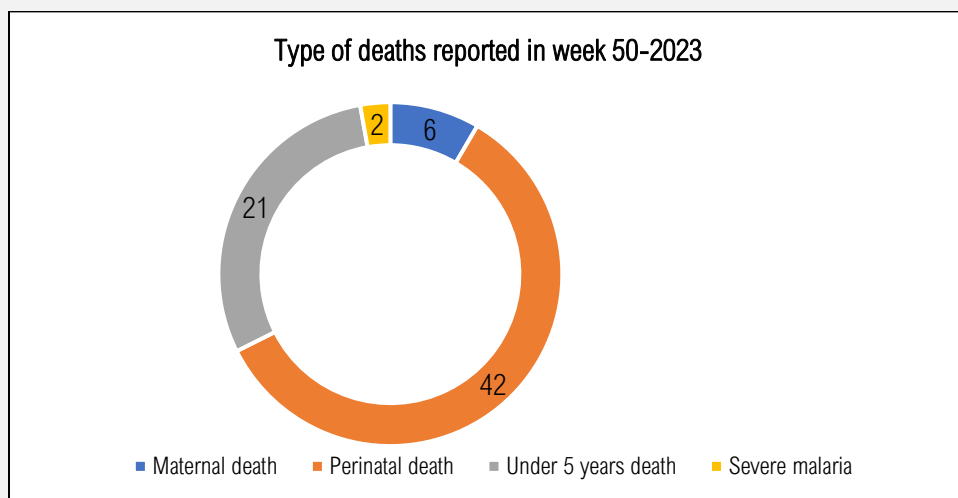
Note: for the diseases whose cases crossed the thresholds, the concerned hospitals are recommended to investigate.

The figures below show the weekly reportable diseases trends:



C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 50

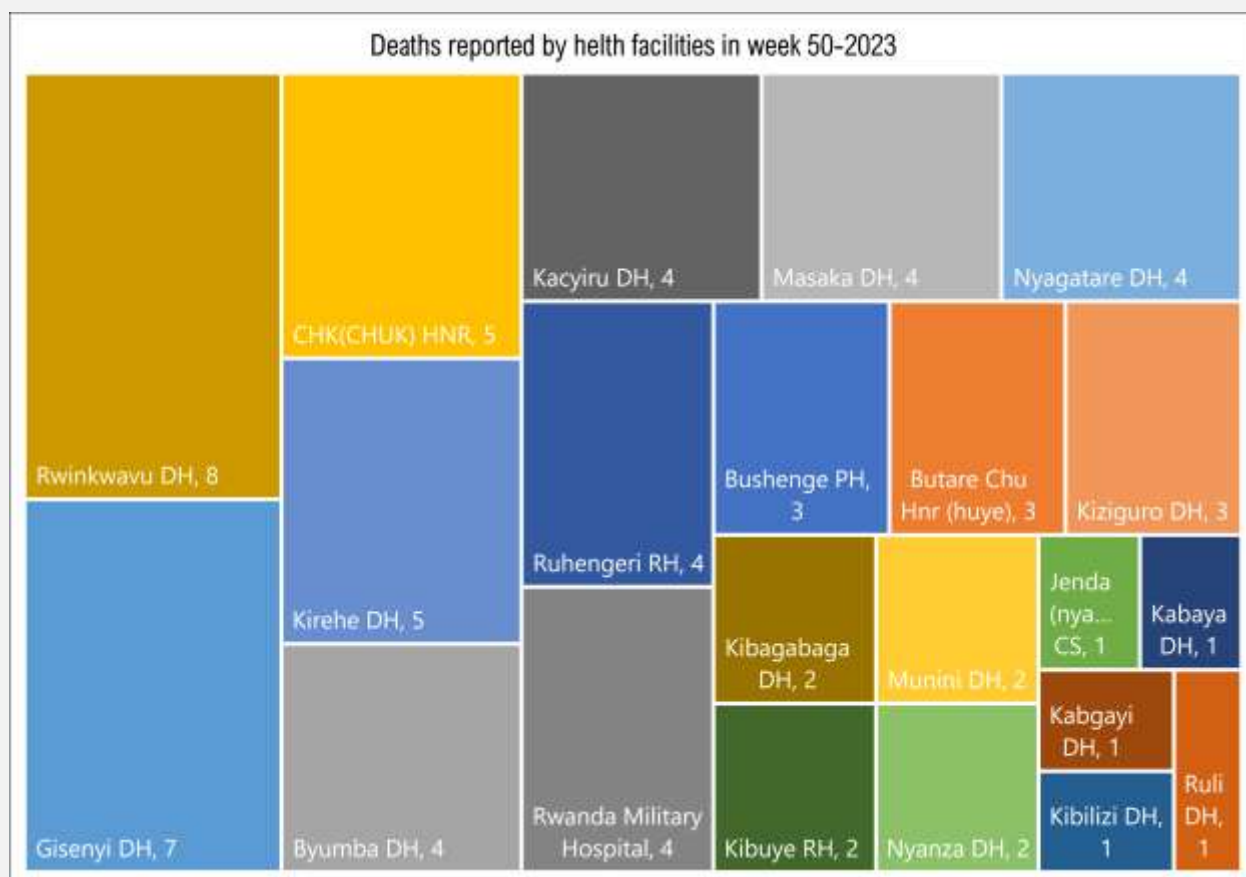
As summarized in the Pie Chart below, a total number of 71 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 42 (59%) were perinatal, 21 (30%) were deaths of children under 5 years old (included 1 death due to severe pneumonia of under 5 children, 4 (8%) maternal deaths and 2(3%) due to severe malaria.



Cause of deaths declared in epi week 50

Deaths were reported from various catchment areas as follow:

- 8 deaths were reported by Rwinkwavu DH
- 7 deaths were reported by Gisenyi DH
- 5 deaths were reported respectively by CHUK and Kirehe DH
- 4 deaths were reported by Byumba DH, Kacyiru DH, Masaka DH, Nyagatare DH, Ruhengeri RH and Rwanda military hospital
- 3 deaths were reported respectively by Kiziguro DH, Bushenge PH and CHUB
- 2 deaths were reported by Kibagabaga DH, Kibuye RH, Munini DH and Nyanza DH
- 1 death was reported respectively by Ruli DH, Kabaya DH, Kabgayi DH, Kibilizi DH and Jenda (Nyamagabe) HC



Distribution of deaths by health facilities in Epi week 50

eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 50

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 50, the overall completeness and timeliness of disease surveillance data reporting in Rwanda was 99% 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 King Faysal hospital and Kacyiru police hospital that had a low timeliness (less than 60%) and Gitwe DH that had a moderate score (78%).

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.

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