



## SUMMARY

### I. COMPLETENESS AND TIMELINESS

- For Public Health Facilities  
Completeness: **96.0%** Timeliness: **73.3 %**
- For Private Health Facilities  
Completeness: **36,0 %** Timeliness: **28.0 %**
- Overall Completeness: **82.4 %**  
Timeliness: **63.1 %**

The low timeliness is observed in cathment area of Kabutare and Mibilizi hospitals with less than 50%, while in Kinihira, Kibogora and Muhororo Hospitals timeliness is 100%.

### II. Cases reported by Public and Private HF's:

- **Malaria:** 13, 715 cases
- **Flu syndrome:** 11,197 cases
- **Non-bloody Diarrhoea:** 3,625 cases
- **Severe Pneumonia in children under five years:** 97 cases
- **Chicken pox:** 39 cases
- **Shigellosis:** 23 cases
- **Mumps:** 23 cases
- **AFP:** Two cases of Acute Flaccid paralysis were notified from Gatenga HC of Masaka hospital
- **Cholera:** one suspected case of Cholera was notified from

# EPIDEMIC SURVEILLANCE AND RESPONSE WEEKLY REPORT

Week 32 from 07<sup>th</sup> to 13<sup>th</sup> August, 2017



RWANDA  
BIOMEDICAL  
CENTER

ESR Division

## HIGHLIGHT OF THE WEEK:

### 1. Trend of four priority diseases with highest morbidity in 2017:

The figure 1 shows the trend of cases of the highest morbidity through e-IDSR notified during the last 32 weeks, those include Malaria, Influenza like illness, Non blood diarrhea and severe pneumonia under five years.

**2. Cholera:** Confirmed outbreak of cholera in Nkombo sector in Rusizi district. (See outbreak investigation report on page 3 )

### III. Deaths reported nationally: 15 deaths notified countrywide

- One death due to **Non Bloody Diarrhea** from Rwinkwavu hospital
- Thirteen deaths due to **Malaria** were notified, three deaths from Kirinda Hospitals, two death each from Masaka, Kabgayi and Ruhango hospitals, one death each from Mukoma HC of Ruhango, Mugonero, Murunda and Kibuye hospitals
- One death due to **severe pneumonia under five years** was notified from Nyagatare hospital

Nkombo HC of Gihundwe hospital

- **Food poisoning:** 20 cases of food poisoning were notified including 17 cases from Remera Rukoma hospital and 3 cases from Kirehe HC
- **Measles:** Five suspected cases of measles were notified one case each from Mahama refugee camp, Birambo HC of Kirinda hospital, Nyagahanga HC and Nyagihanga HC of Ngarama hospital and Kabarondo HC of Rwinkwavu hospital
- **Dog bites (rabies exposure):** 9 cases of dog bites (rabies exposure) were notified including 2 cases each from Mibilizi and Kirehe hospitals, one case each from Masoro HC of Rutongo hospital, Kibuye hospital, Kibogora hospital, Sovu HC of Kabutare hospital and Kibungo hospital
- **Typhoid fever:** 32 suspected cases of Typhoid fever were notified including 20 cases from Mahama refugee camp II HC, 8 cases from Mahama refugee camp HC and 4 cases from Butaro hospital

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A Healthy People. A Wealthy nation

# EPIDEMIC SURVEILLANCE AND RESPONSE WEEKLY REPORT

## 1. High Morbidity diseases for the last 32 weeks, 2017

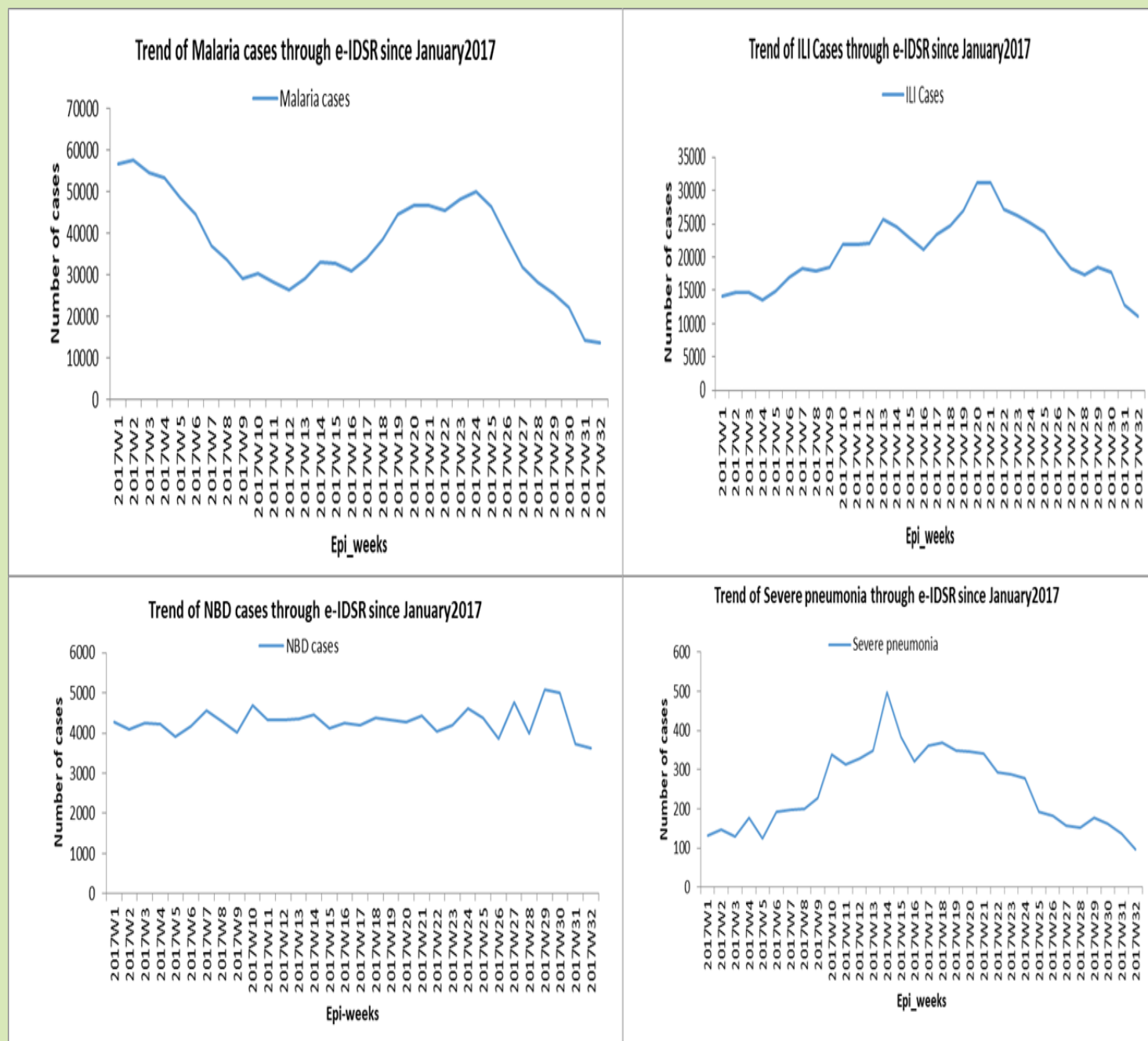


Figure 1. High morbidity diseases through e-IDSR in Rwanda

Source: Rwanda e-IDSR

# EPIDEMIC SURVEILLANCE AND RESPONSE WEEKLY REPORT

## Preliminary report of cholera investigation, Nkombo Island, August 2017

### Background

On 14th August 2017, Nkombo HC/Gihundwe DH notified an imported confirmed case of cholera with history of travel in Bukavu /DRC and from 19th August 2017 other cases of acute diarrhea resident of Nkombo island were reported. In addition to this, there is an ongoing of cholera outbreaks in most provinces of DRC including North and South Kivu (according to WHO outbreak bulletin) and considering the cross border movement of people of the two countries, there is a high risk of importation of more cases and to this a field investigation was organized with the following objectives:

- Assess the magnitude of the problem
- Describe cases by place, person and time
- Assess potential risk factors
- Guide in preventive and control measures

### Results

Description of cases by person, place and time

- A total of 21 cases meeting the case definition consulted Nkombo HC from 6th to 24th August 2018
- 17 out of 21 cases (80%) of the cases were from two cells (Kamagimbo (11 cases) and Ishywa (6 cases); Kabuye village (of Kamagimbo Cell) was the most affected village with 6 cases (Attack rate: 0.6%)
- 13 samples were collected and three (3) of them were confirmed positive to *V. cholerae*, seven (7) were negative and three (3) are pending
- The 3 confirmed cases are from Ishywa cell (island) and 2 of them had history of travel in Democratic Republic of Congo for their daily activities
- No transmission was observed within households and no death was reported

**Table 1: Description of cases by person, place and time**

Variables (N=21)	n	%
Age group		
under 5	9	42.86
5 to 14	6	28.57
15 to 24	1	4.76
25 to 34	1	4.76
35 to 44	0	0
45 and above	4	19.05
Sex		
F	12	57.14
M	9	42.86
Cell		
Bigoga	1	4.76
Bugarura	1	4.76
Ishywa	6	28.57
Kamagimbo	11	52.38
Rwenje	2	9.52
Villages		
Biraro	2	9.52
Gashara	2	9.52
Gaturo	1	4.76
Gitwa	2	9.52
Kaboneke	3	14.29
Kabuye	6	28.57
Mafula	1	4.76
Mirara	1	4.76
Muhora	1	4.76
Nyawenya	1	4.76
Rutarakiro	1	4.76
Sample collected		
Yes	13	61.9
No	8	38.1
Lab results		
Positive	3	23
Negative	7	53.85
Pending	3	23.08

# EPIDEMIC SURVEILLANCE AND RESPONSE WEEKLY REPORT

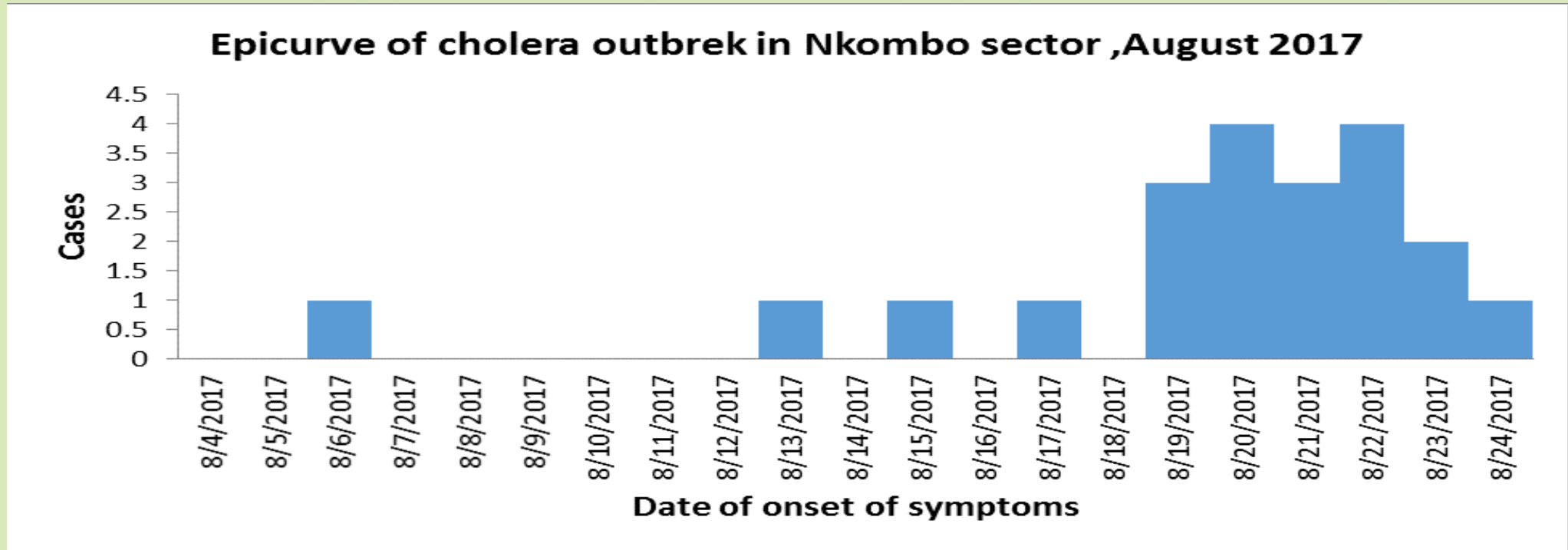


Fig 1: Epidemic curve of cholera outbreak in Nkombo Island, August 2017

## Water sanitation and hygiene (WASH) status in Nkombo island

- Wastes including medical wastes from Bukavu were observed on the edge of lake Kivu on Rwanda side
- Most of the households in the most affected villages don't have adequate latrines: 460 out of 895 (51% households in Kamagimbo cell and 371 out of 457 households (81%) in Ishywa cell have inadequate latrines
- The population in the most affected cells make a long distance (1 hour from the household to the water pump) to fetch water due to insufficiency of water pumps and the population prefer to use water of Lake Kivu: Kamagimbo (only 3 out of 7 water pumps are functioning) and Ishywa ( only 1 pump out of 3 is functioning ).

**Table 2. Status of water and sanitation in Nkombo island, August 2017**

Cell	Availability of WASAC Water	Number of available Water pumps	Number of Functional water pumps
Bigoga	Yes	5	2
Bugarura	Yes	4	1
Ishywa	No	3	1
Kamagimbo	No	7	3
Rwenje	Yes	4	1
Availability of latrines	Number of HH	inadequate latrine	HH without latrine
Bigoga	909	111	0
Bugarura	469	59	0
Ishywa	457	371	6
Kamagimbo	895	429	6
Rwenje	532	54	0

## Findings from the Visit of Nyarushishi Transit center

- Nyarushishi TC has the capacity to host 600 people.
- Returnees stay in the transit center for 8 to 14 days
- The Transit center has a small health post for outpatients
- The complicated cases are transferred at Gihundwe DH
- There is no isolation room in case of contagious diseases (e.g. Cholera)
- There is no laboratory to perform basic complementary lab investigation (only TDR and pregnancy test)
- The review of medical register of Nyarushishi Health Post revealed that diarrhea is the 1st cause of consultation but all cases were treated as outpatient and no sample was collected

## Action taken

- Reinforce Infection Control and Prevention (IPC) measures at Nkombo HC
- Health education of the community health workers on preventive measures of cholera
- Distribution of flyers on cholera preventive measures in the community via CHWs
- Share findings with Rusizi Mayor for implementation and follow up of recommendations
- Distribution of pull up banners at 4 main borders of Rusizi District (Ruhwa, Bugarama-Kamanyora, Rusizi I and Rusizi II)
- Meeting with all heads of health facilities in Rusizi and CHWs of Nkombo HC to increase awareness on the ongoing outbreak of cholera in Nkombo and possible of importation of cases from Bukavu.
- Radio sport on hygiene and sanitation is aired from 24th August 2017 twice per day at Rusizi Community radio

## Other planned activities:

- Radio talk on cholera and strategies of prevention was planned on Community Radio of Rusizi
- Rusizi district team, local authorities and health team conducted in all villages by Monday 29th August 2017
- Preventive message was distributed in all churches has been signed by the mayor and will be diffused in all churches and during the Umuganda of 26th August 2017
- Evacuate waste on the edge of lake Kivu was done during Umuganda of 26th August 2017

## Recommendations

### Health facilities:

- Enhance surveillance of diarrhea cases at all health facilities in Rusizi District for early detection of cases and notification
- Respect all measures of IPC
- Use CHWs to conduct house to house education on cholera preventive measures and refer all diarrheal cases to the nearest health facility
- Gihundwe DH to support Nyarushishi Transit center in sample testing for laboratory diagnosis in order to detect as soon as possible outbreaks
- Mibilizi DH to conduct formative supervision and support the health post of Nyarushishi transit center in reporting of priority diseases in e-IDSR

### Rusizi District

- Reparation of water pumps which are not functioning in Nkombo Sectors
- Work closely with WASAC to avail safe water in remaining villages
- Organize as soon as possible meetings at all levels on cholera preventive measures in collaboration with health professionals
- Evacuate all wastes observed on the edge of Kivu Lake
- Organize campaign to construct adequate latrines in the community
- Rusizi District authorities to work closely with Bukavu Town authorities on the issue of wastes thrown in Lake Kivu.

### AHA/UNHCR

- Avail and equip an isolation room in the Nyarushishi transit center
- Respect requirements of surveillance and response strategy including early detection and notification of priority diseases
- UNHCR Rwanda to collaborate closely with UNHCR Bukavu for information sharing with regards to the ongoing outbreak of cholera in Bukavu
- UNHCR to ensure that there no ongoing outbreak in Bukavu transit center and screen all returnees before coming
- Work closely with Gihundwe DH for sample collection for lab diagnosis for early detection of outbreaks
- Repair tap water which are not functioning



ANNEX 1: THE FOLLOWING 19 PUBLIC HEALTH FACILITIES DIDN'T SUBMIT THEIR REPORTS IN WEEK 32/2017

Province	Hospital	Facility Name
East	Gahini	Gahini DH
East	Kiziguro	Bugarura CS
East	Nyamata	Gashora CS
East	Rwamagana	Nzige CS
Kigali City	Kibagabaga	Prison Kimironko(Remera Pris)
North	Byumba	Bwisige CS
North	Byumba	Giti CS
North	Byumba	Miyove CS
North	Ruhengeri	Muhoza (Ruhengeri) CS
North	Ruhengeri	Prison Ruhengeri DISP
South	Gakoma	Gakoma CS
South	Kabgayi	Gitarama CS
South	Kabutare	Huye Police CS
South	Nyanza	Hanika I (NYANZA) CS
South	Nyanza	Nyamiyaga (Nyanza) CS
South	Nyanza	Prison Mpanga Pris (nyanza)
South	Remera Rukoma	Musambira CS
West	Mibilizi	Nkungu CS
West	Murunda	Kabona CS

## ANNEX 2. CASES NOTIFIED DURING WEEK 32, 2017

Public Health Facilities																										
Province	Hospital	Completeness (%)	Timeliness (%)	Non bloody diarrhoea	Flu syndrome	Malaria	Severe Pneumonia for under five years	Acute Flaccid Paralysis	Bloody Diarrhea	Chicken Pox	Cholera	Diphtheria	Epidemic Typhus	Food poisoning	Hemorrhagic fever	Measles	Meningitis	Mumps	Neonatal tetanus	Plague	dog bites (Rabies exposure)	Rubella	Typhoid fever	Viral Conjunctivitis	Whooping Cough	Yellow fever
East	Gahini	88.9	66.7	41	111	460	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East	Kibungo	100.0	92.9	89	39	752	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
East	Kirehe	100.0	77.8	292	1438	332	7	0	1	5	0	0	0	3	0	1	0	0	0	0	2	0	28	0	0	0
East	Kiziguro	92.3	53.8	143	180	221	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East	Ngarama	100.0	75.0	89	337	67	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
East	Nyagatare	100.0	77.3	192	155	96	7	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East	Nyamata	94.1	76.5	94	606	1051	3	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
East	Rwamagana	93.8	56.3	130	691	430	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
East	Rwinkwavu	100.0	50.0	28	46	198	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Kigali City	Kibagabaga	94.7	73.7	82	717	457	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kigali City	Masaka	100.0	90.9	47	195	195	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kigali City	Muhima	100.0	83.3	63	335	191	3	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North	Butaro	100.0	80.0	109	207	79	4	0	1	2	0	0	0	0	0	0	0	14	0	0	0	0	4	0	0	0
North	Byumba	88.5	73.1	98	378	74	3	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North	Kinshira	90.0	100.0	56	15	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North	Nemba	93.8	93.8	118	59	61	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
North	Ruhengeri	88.2	58.8	107	298	50	9	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North	Ruli	100.0	88.9	34	112	76	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North	Rutongo	92.3	76.9	43	149	125	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
South	Gakoma	83.3	83.3	61	86	289	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Gitwe	100.0	77.8	16	96	513	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Kabgayi	94.4	77.8	47	314	464	3	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Kabutare	94.4	33.3	106	221	306	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
South	Kaduha	100.0	90.0	34	229	115	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Kibilizi	100.0	90.0	79	163	635	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Kigeme	100.0	58.3	51	278	250	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Munini	100.0	88.2	87	379	313	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Nyanza	83.3	56.6	144	223	486	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
South	Remera Rukom	92.3	61.5	66	434	909	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0
South	Ruhango	100.0	87.5	33	171	674	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West	Bushenge	100.0	87.5	56	166	331	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West	Gihundwe	100.0	77.8	53	280	193	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
West	Gisenyi	100.0	69.2	129	441	96	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West	Kabaya	100.0	86.7	4	52	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West	Kibogora	100.0	100.0	105	212	1006	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
West	Kibuye	100.0	50.0	104	182	273	2	0	2	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
West	Kirinda	100.0	50.0	23	48	144	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
West	Mibilizi	90.9	46.5	79	27	629	6	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
West	Mugonero	100.0	57.1	31	102	306	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West	Muhororo	100.0	100.0	29	97	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West	Murunda	94.4	77.8	140	143	280	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West	Shyira	100.0	62.5	115	364	18	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Referral hospital	CHUB	100.0	0.0	5	20	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Referral hospital	CHUK	100.0	100.0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Referral hospital	Rwanda Militar	100.0	0.0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SubTotal		96.0	73.3	3446	10776	13294	85	2	22	34	1	0	0	20	0	5	0	22	0	0	9	0	32	0	0	0



# EPIDEMIC SURVEILLANCE AND RESPONSE WEEKLY REPORT

P.9

Private Health Facilities: Completeness: 36.0 % Timeliness: 28.0%

Province	Hospital	Non bloody Diarrhoea	Flu syndrome	Malaria	Severe Pneumonia for under five years	Acute Flaccid Paralysis	Bloody Diarrhea	Chicken Pox	Cholera	Diphtheria	Epidemic Typhus	Food poisoning	Hemorrhagic fever	Measles	Meningitis	Mumps	Neonatal tetanus	Plague	dog bites (Rabies exposure)	Rubella	Typhoid fever	Viral Conjunctivitis	Whooping Cough	Yellow fever
East	Gahini	11	5	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East	Kibungo	12	4	231	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East	Kirehe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East	Kiziguro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East	Ngarama	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East	Nyagatare	6	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East	Nyamata	5	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East	Rwamagana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East	Rwinkwavu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kigali City	Kibagabaga	50	133	45	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kigali City	Masaka	6	17	20	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kigali City	Muhima	25	54	29	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North	Butaro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North	Byumba	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North	Kinshira	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North	Nemba	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North	Ruhengeri	1	25	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North	Rutongo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Gakoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Gitwe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Kabgayi	25	73	45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Kabutare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Kaduha	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Kigeme	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Munini	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Nyanza	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Remera Rukon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South	Ruhango	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West	Bushenge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West	Gihundwe	5	8	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West	Gisenyi	22	12	12	6	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
West	Kabaya	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West	Kibuye	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West	Mibilizi	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West	Muhororo	1	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West	Shyira	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SubTotal		173	401	408	11	0	1	5	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0