



MINISTRY OF HEALTH

WEEKLY EPIDEMIOLOGICAL Bulletin

Week 42

from 15th to 22nd October 2012

Editorial

This week was characterized by outbreak of cholera at Kinunu health center with laboratory confirmation and Biruyi health center of Murunda district hospital, Rutsiro District, Western Province. There is no death reported. Slight increase of cases of non bloody diarrhes, Malaria (Nyange HC, Kibungo DH), suspected cases of measles at Kinyinya and Rurenge HCs.

Regionally, there was a confirmation of Marburg hemorrhagic Fever in Uganda.

The timeliness and completeness of reporting from district hospital dropped to 91% and 97% respectively. The following health facilities did not submit their reports:

CHUK; Kigeme DH;

Ruhengeri DH; Kiziguro DH

Masaka, Gahanga and

Bethsaida HCs (Masaka

DH); Bisate HC (Ruhengeri

DH); Byahi HC, Gisenyi

prison (Gisenyi DH); Gasiza

and Bushara HCs (Byumba

DH); Gasange-

Humure, Rugarama HCs (Ki

ziguro HCs)

Contact Person

Dr. Thierry NYATANYI

Tel: +250788301902

RBC/IHDPC/ EID Division

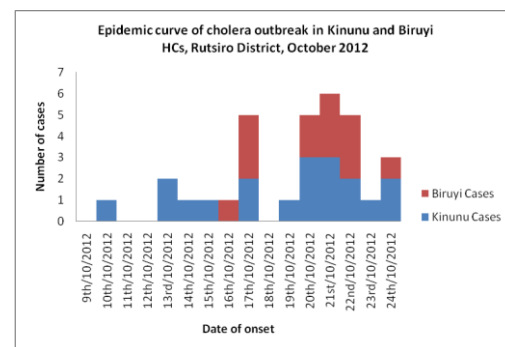
B.P: 7162 KIGALI-RWANDA, Toll free N^o: 3334-3335, e-mail: trac.simr@gmail.com

Cholera Outbreak in Kinunu and Biruyi Health Centers

A cholera outbreak has been reported in Rutsiro district, Western Province. The index case was a 34 years old male from Bugarama Island in Lake Kivu who reported at the health center on October 10th, 2012. He had the following symptoms: watery diarrhea, vomiting and abdominal pain with severe dehydration.

The stool sample collected and sent to the National Reference Laboratory was found positive for vibrio cholera Inaba which was sensitive to ciprofloxacin, Cefotaxime, Gentamycin, Tetracycline and Nalidixic Acid and resistant to Ampicillin, chloramphenicol.

From 10th to 22nd October, 24 cases were reported in 2 health centers Kinunu and Biruyi in the same district. All cases have been hospitalized but no death was reported.



Control and preventive measures

In the affected villages, the population were living in poor hygienic conditions, and using no clean water; affected patients reported using unboiled and untreated water from the Kivu Lake.

The latrines of the cases visited was poorly built and dirty.

Continue to page 2



Cases were using non constructed and unroofed toilets



Almost all people of the Island use unclean, unboiled and untreated water of Kivu Lake

The control and preventive measures that were put in place included:

- Distribution of Sur Eau for water purification
- Health education on hand washing using soap after toilet use and before eating, drinking clean, boiled and treated water using Sur Eau.
- Advocacy for distribution of clean water in the population close to Lake Kivu and in the Bugarama Island.
- Sensitization of the population to build latrines and use them adequately
- Transfer of the suspected cases at health facilities as early as possible
- The population was warned to avoid eating raw/uncooked foods (banana, cane sugar...) or buying food sold on street.

DISEASE HIGHLIGHTS: Every week, a disease is highlighted in the weekly Epidemiological bulletin to sensitize and familiarize readers with the various diseases under surveillance. This week, **Marburg Viral hemorrhagic Fever** is featured

What is Marburg Viral hemorrhagic fever?

Marburg VHF is a severe acute viral illness characterized by sudden onset of fever, malaise, myalgia and headache, followed by pharyngitis, vomiting, diarrhea, and maculopapular rash. Severe cases present with hemorrhagic manifestations, hepatic damage, renal failure, central nervous system symptoms (confusion, irritability and aggression) and terminal shock with multiple organ dysfunction. In fatal cases, death occurs most often between 8 and 9 days after symptom onset, usually preceded by severe blood loss and shock

Causative agent: *Marburg virus* of the Filoviridae family

Occurrence of Marburg VHF

- 1967:** Germany and Yugoslavia (31 cases)
- 1975:** Zimbabwe in 1975 (3 cases)
- 1980:** Kenya (2 cases)
- 1998-2000:** Democratic Republic of Congo (12 cases confirmed among over 145 suspected cases)
- 2005:** Angola (351 cases, 312 deaths).
- 2007:** Uganda
- 2012, October:** Uganda (Ongoing outbreak)

This is an ongoing outbreak in Kabale in Western Uganda. As of 21st, October, 3 out of 7 probable cases had been confirmed. The focal point of the outbreak in Uganda borders district of Rwanda. Due to the proximity and interactions of the populations across the border, the bordering districts in Rwanda **are also at risk and there is need to institute robust** preparedness measures regarding prevention and control.

Mode of transmission:

Person to person transmission through direct contact with infected blood, secretions, organs or semen. Risk is highest during late stages of the disease when the patient is vomiting, having diarrhea or bleeding and during funerals with unprotected body preparation. Transmission through infected semen can occur up to seven weeks following clinical recovery.

Incubation period: 3-9 days

Diagnosis:

A combination of assays detecting antigen or RNA and antibody IgM or IgG. RT-PCR or Elisa antigen detection can be used on blood, serum or organ homogenates.

Treatment:

There is no specific drug treatment for Marburg VHF. Generally, patients receive supportive therapy which consists of balancing the patient's fluids and blood chemistries, maintaining their oxygen status and blood pressure, and treating them for any complicating infections.

Prevention and control Measures

- Report individual cases to health authorities
- Strict isolation of suspected cases
- Strict use of infection prevention and control measures
- Concurrent disinfection
- Follow-up investigations and surveillance of close contacts

The Ministry of Health through EID division-RBC upon informed on the ongoing deadly outbreak has set up prevention measures to protect the country:

1. Alert all district hospital directors and surveillance focal persons on the ongoing outbreak, the same message were sent to all health centers.
2. Emphasis was put on the case detection, reporting and management
3. Training of all district hospitals and health centers personnel in detection and management of VHF
4. Distribution of supplement PPEs to all DH in need of them
5. Increase public awareness through communication channels: radio messages, flyers and posters on Marburg virus.

Ebola outbreak in Democratic Republic of Congo

26 OCTOBER 2012 - As of 24 October 2012, 52 cases (35 laboratory confirmed, 17 probable) with Ebola haemorrhagic fever (EHF) have been reported in the Democratic Republic of Congo (DRC). Of these, 25 have been fatal (12 confirmed, 13 probable).

The cases are reported from Isiro and Viadana health zones in Haut-Uélé district in Province Orientale.

The Ministry of Health (MoH) continues to work with local health authorities and international partners in active surveillance, tracing of contacts of probable and confirmed cases, infection prevention and control in health care settings, management of patients in health care facilities, logistics, social mobilization, provision of psychosocial support and conducting anthropological analysis to support the control of the outbreak.

Surveillance activities are being strengthened in Isiro and neighbouring areas, including Bedhe and Nakwapongo. In Isiro, health care workers are being trained on basic infection prevention and control in health care settings. Through the Global Outbreak Alert and Response Network (GOARN), a field laboratory has been set up by the Public Health Agency of Canada (PHAC).

Social mobilization activities are being carried out in schools and churches in Isiro, Rungu and Ngosaku to provide information on protection against the Ebola virus and to discuss concerns of the local population such as, working with traditional healers in raising awareness about EHF, providing psychosocial support to affected families, and conducting outreach to schools.

With respect to this event, WHO does not recommend any travel or trade restrictions to be applied to the DRC.

General information on controlling infection of EHF in health-care settings

Human-to-human transmission of the Ebola virus is primarily associated with direct contact with blood and body fluids. Transmission to healthcare workers has been reported when appropriate infection control measures have not been observed.

Health-care workers caring for patients with suspected or confirmed Ebola virus need to apply infection control measures to avoid any exposure to the patient's blood and body fluids and/or direct unprotected contact with the possibly contaminated environment. In addition, it is important that Standard Precautions, particularly hand hygiene, the use of gloves and other personal protective equipment, safe injection practices and other measures are applied to all patients in all health care settings at all times.

From: www.who.int

Acknowledgement

To all staff working on Disease Surveillance from health centers to district hospitals for their efforts and commitment to avail data for elaboration of this bulletin.

EDITORIAL BOARD

1. Dr. Thierry NYATANYI
2. Dr. José NYAMUSORE
3. Dr. Marie Aimée MUHIMPUNDU
4. Adeline KABEJA
5. Dr. Veronicah MUGISHA
6. Dr. André RUSANGANWA
7. Robert K. MUGABE
8. Emmanuel NSHIMIYIMANA

ANNEX 1: SUMMARY OF CASES NOTIFIED, TIMELINESS AND COMPLETENESS DURING WEEK 42, 2012

PROVINCE	DISTRICT HOSPITAL	% timeliness	% completeness	Sum of Blood Diarrhea Cases	Sum of Non Blood Diarrhea Cases	Sum of Cholera Cases	Sum of Meningitis Cases	Sum of Acute Flaccid Paralysis	Sum of Measles Cases	Sum of Neo Natal Tetanos Cases	Sum of E.Typhus Cases	Sum of Y.fever Cases	Sum of H.fever Cases	Sum of Pestis Cases	Sum of Rabies Cases	Sum of Confirmed Malaria Cases	Sum of Pneumoni a Cases	Sum of Influenza Like Illness	Sum of Chickenpo x Cases	Sum of Rubella Cases	Sum of Food Poisoning Cases	Sum of Diphteria cases	Sum of Pertuisis cases	Sum of Typhoid Fever cases	Sum of Mumps Cases	Sum of viral Conjunctiv itis cases
EAST	Gahini HD	88	100	0	33	0	0	0	0	0	0	0	0	0	0	124	9	172	0	0	0	0	0	0	0	
	Kibungo HD	100	100	0	99	0	0	0	0	0	0	0	0	0	0	666	6	670	0	0	0	0	0	0	0	
	Kirehe HD	100	100	33	145	0	0	0	1	0	0	0	0	0	0	871	62	681	12	9	0	0	0	0	4	
	Kiziguro HD	67	42	27	46	0	0	0	1	0	0	0	0	0	0	41	12	144	11	0	0	0	0	0	3	
	Ngarama HD	100	100	9	48	0	0	0	0	0	0	0	0	0	0	58	33	124	0	0	0	0	0	0	0	
	Nyamata HD	100	100	14	109	0	0	0	0	0	0	0	0	0	0	736	27	419	0	0	0	0	0	0	6	
	Nyagatare HD	81	100	0	173	0	0	0	1	0	0	0	0	0	0	1017	21	584	0	0	0	0	0	0	0	
	Rwamagana HD	81	100	4	62	0	0	0	0	0	0	0	0	0	0	204	124	0	0	0	0	0	0	0	0	
	Rwinkwavu HD	100	100	7	59	0	0	0	0	0	0	0	0	0	0	119	44	112	3	0	0	0	0	0	4	
NORTH	Butaro HD	94	100	3	102	0	0	0	0	0	0	0	0	0	0	46	50	400	4	0	0	0	0	0	1	
	Byumba HD	64	91	0	90	0	0	0	0	0	0	0	0	0	0	27	17	472	0	0	0	0	0	0	0	
	Nemba HD	85	100	4	55	0	0	0	0	0	0	0	0	0	0	7	9	248	0	0	0	0	0	0	0	
	Ruhengeri HD	73	87	1	144	0	0	0	0	0	0	0	0	0	0	11	4	495	3	0	0	0	0	0	1	
	Ruli HD	75	100	4	41	0	0	0	0	0	0	0	0	0	0	5	3	83	5	0	0	0	0	0	0	
WEST	Rutongo HD	100	100	0	76	0	0	0	0	0	0	0	0	0	0	87	1	289	1	0	0	0	0	0	0	
	Bushenge HD	100	100	2	45	0	0	0	0	0	0	0	0	0	0	65	2	167	3	0	0	0	0	0	0	
	Gihundwe HD	100	100	0	62	0	0	0	2	0	0	0	0	0	0	121	11	247	2	0	0	0	0	0	0	
	Gisenyi HD	83	83	0	101	0	0	0	1	0	0	0	0	0	0	3	11	589	0	0	0	0	0	0	0	
	Kabaya HD	100	100	2	8	0	0	0	0	0	0	0	0	0	0	8	1	56	0	0	0	0	0	0	0	
	Kibogora HD	92	100	0	57	0	0	0	0	0	0	0	0	0	0	80	0	244	0	0	0	0	0	0	0	
	Kibuye HD	100	100	20	57	0	0	0	0	0	0	0	0	0	0	12	26	257	1	0	0	0	0	0	0	
	Kirinda HD	86	100	0	9	0	0	0	0	0	0	0	0	0	0	6	1	44	1	0	0	0	0	0	0	
	Mibilizi HD	100	100	0	73	0	0	0	0	0	0	0	0	0	0	258	0	226	1	0	0	0	0	0	0	
	Mugonero HD	100	100	5	25	0	0	0	0	0	0	0	0	0	0	16	6	171	0	0	0	0	0	0	0	
	Muhororo HD	100	100	3	16	0	0	0	0	0	0	0	0	0	0	1	5	50	0	0	0	0	0	0	2	
	Murunda HD	100	100	18	82	18	0	0	0	0	0	0	0	0	0	15	34	123	0	0	0	0	0	0	0	
	Shyira HD	94	94	8	38	0	0	0	0	0	0	0	0	0	0	7	8	128	0	0	0	0	0	0	0	
	SOUTH	BUTARE CHU	100	100	0	8	0	0	0	0	0	0	0	0	0	0	17	0	9	0	0	0	0	0	2	0
		Gakoma HD	100	100	9	31	0	0	0	0	0	0	0	0	0	0	297	6	157	0	0	0	0	0	0	0
Gitwe HD		100	100	9	65	0	0	0	0	0	0	0	0	0	0	141	107	287	0	0	0	0	0	0	0	
Kabgayi HD		100	100	13	66	0	0	0	0	0	0	0	0	0	0	41	86	271	7	0	0	0	0	11	23	
Kabutare HD		88	100	38	105	0	0	0	0	0	0	0	0	0	0	729	20	280	12	0	0	0	0	0	1	
Kaduha HD		100	100	5	29	0	0	0	0	0	0	0	0	0	0	6	7	98	0	0	0	0	0	0	0	
Kibilizi HD		100	100	19	69	0	0	0	0	0	0	0	0	0	0	799	63	223	2	0	0	0	0	0	0	
Kigeme HD		91	91	9	50	0	0	0	0	0	0	0	0	0	0	7	8	195	6	0	0	0	0	0	6	
Munini HD		100	100	2	53	0	0	0	0	0	0	0	0	0	0	49	2	345	2	0	0	0	0	0	2	
Nyanza HD		100	100	13	48	0	0	0	0	0	0	0	0	0	0	1137	36	102	4	0	0	0	0	0	0	12
KIGALI TOWN	Remera Rukoma HD	100	100	20	46	0	0	0	0	0	0	0	0	0	0	236	45	276	1	0	0	0	0	0	1	
	Kibagabaga HD	94	100	4	126	0	0	0	0	0	0	0	0	0	0	355	6	559	0	0	0	0	0	0	0	
	Masaka HD	67	67	2	33	0	0	0	0	0	0	0	0	0	0	54	0	201	6	0	0	0	0	0	0	
	CHUK	0	0																							
	Muhima HD	100	100	7	114	0	0	0	0	0	0	0	0	0	0	29	5	496	14	0	0	0	0	0	1	
TOTAL		91	97	314	2698	18	0	0	6	0	0	0	0	0	0	8508	918	10694	101	9	0	0	0	2	34	75