



# WEEKLY EPIDEMIOLOGICAL Updates

Week 07, from 10<sup>th</sup> to 16<sup>th</sup> February 2014

RBC/IHDPC/ EID Division

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## Diseases highlight: Diarrhea diseases

### Summary

\* 18 cases of Dog bites (Suspected Rabies) from : Murara and Busasamana HCs (Gisenyi DH) one case respectively, Nyamagabe and Uwinkindi HCs of Kigeme DH (2 and 3 cases respectively), Kinyamakara HC of Kabutare DH (3 cases) and Kabutare DH (8 cases)

\* 4 Cases of Cholera of which 3 were confirmed : from Mukoma HC (Bushenge DH)

**Deaths:** Eight deaths were reported countrywide of which two were due to malaria, three were due to non-bloody diarrhea while three were due to severe pneumonia

The overall completeness and timeliness were 90,2% and 80,2% respectively. For public health facilities completeness was 97,9 % and timeliness was 89,2% while in private health facilities it was 70,1 % and 56,7 % respectively

**The following public health facilities did not submit their reports:**

Bwisige HC of Byumba DH, Rutobwe HC of Kabgayi DH, Kirambo HC of Kibuye DH, Ntaruka HC of Kirehe DH, Gitega HC of Muhima DH, Ndera Hospital, Nyagatare prison of Nyagatare DH, Mpanga prison and Mweya HC of Nyanza DH, Shingiro HC of Ruhengeri DH

**Contact person**

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### Definition

Diarrhoea is defined as the passage of three or more loose or liquid stools per day (or more frequent passage than is normal for the individual). Frequent passing of formed stools is not diarrhoea, nor is the passing of loose, "pasty" stools by breastfed babies.

Diarrhoea is usually a symptom of an infection in the intestinal tract, which can be caused by a variety of bacterial, viral and parasitic organisms. Diarrhoeal disease is the second leading cause of death in children under five years old, and is responsible for killing 1.5 million children every year.

Diarrhoea can last several days, and can leave the body without the water and salts that are necessary for survival. Most people who die from diarrhoea actually die from severe dehydration and fluid loss. Children who are malnourished or have impaired immunity are most at risk of life-threatening diarrhoea.

There are three clinical types of diarrhoea:

**acute watery diarrhoea** – lasts several hours or days, and includes cholera;

**acute bloody diarrhoea** – also called dysentery; and

**persistent diarrhoea** – lasts 14 days or longer.

The degree of dehydration is rated on a scale of three.

1. **Early dehydration** – no signs or symptoms.

2. **Moderate dehydration:**

- Thirst
- restless or irritable behavior
- decreased skin elasticity
- sunken eyes

3. **Severe dehydration:**

- symptoms become more severe
- shock, with diminished consciousness, lack of urine output, cool, moist extremities, a rapid and feeble pulse, low or undetectable blood pressure, and pale skin.

### Causes

**1. Infection:** Diarrhoea is a symptom of infections caused by a host of bacterial, viral and parasitic organisms, most of which are spread by faeces-contaminated water. Infection is more common when there is a shortage of clean water for drinking, cooking and cleaning. Rotavirus and Escherichia coli are the two most common causes of diarrhoea in developing countries.

**2. Malnutrition:**

Children who die from diarrhoea often suffer from underlying malnutrition, which makes them more vulnerable to diarrhoea.

**3. Source:** Water contaminated with human faeces, for example, from sewage, septic tanks and latrines, is of particular concern. Animal faeces also contain microorganisms that can cause diarrhoea.

**Other causes:** Diarrhoeal disease can also spread from person-to-person, aggravated by poor personal hygiene. Food is another major cause of diarrhoea when it is prepared or stored in unhygienic conditions. Water can contaminate food during irrigation. Fish and seafood from polluted water may also contribute to the disease.

### Symptoms

Mostly diarrhoeal is characterized by; thirst, restless or irritable behavior, decreased skin elasticity, sunken eyes.

### Prevention and treatment

Key measures to prevent diarrhoea include:

- access to safe drinking-water
- improved sanitation
- exclusive breastfeeding for the first six months of life
- good personal and food hygiene
- health education about how infections spread
- rotavirus vaccination.

### Case definition

#### ***For Moderate dehydration***

Every child under 5 years suffering from diarrhea with the following signs: decreased skin elasticity, restless or irritable behavior, intense thirsty and sunken eyes

#### ***For Severe dehydration***

Every child under 5 suffering from diarrhea at least presenting 2 of the following signs: - shock with diminished consciousness, - sunken eyes, pale skin, lack of urine.

## Acknowledgement

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

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### UPCOMING EVENTS

Event	Date
World health day	07 April 2014
World immunization	23-30 April 2014

### The Following Private health Facilities did not submit their reports:

Humura(Karembo) Disp(Private\_ Kibungo HD); Mamfu Disp, Gakoni Disp, Bugarama PS, Kabeza PS, Ruhuha PS(Private\_Kiziguro HD); De la Charité (Nyagatare) Disp,NYAGASHANGA PS,NKOMA PS, MISHENYI PS(Private\_Nyagatare HD); Kira (Nyamata) Disp(Private\_Nyamata HD); Ubumwe Disp,Hirwa Disp(Private\_Rwamagana HD); RUSHENYI PS(Private\_Rwinkwavu HD); Amani Disp,Umucoyo DispDispensaire de la Vallée,Ubuzima bwiza Disp,SANTE FAMILIALE Disp, SHA PS,MBANDAZI PS,BUMBOGO PS,GASOGI PS (Private\_Kibagabaga HD); Apade Clinic,Muvandimvwe Disp, Saint Moise Clinic(Private\_Masaka HD); BAHU Clinic, La Bonne Santé (Kinyinya) Disp ,Ihumure Disp,Polyclin du Bon Berger, Umushumba Mwiza Disp,Umurinzi Cab Méd. ,Don de Dieu Disp, Amahoro (Nyarugenge) Disp ,Espoir Disp,POLYCLINIQUE DES 3 AGES, MUHIMA Disp (Private\_Muhima HD); Hope Disp, Iwacu (Gicumbi) Disp.,Mataba PS, KABUGA PS (Private\_Byumba HD); Nyamagumba clinic,Les 3 Colombes Clinic(Private\_Ruhengeri HD); La Benediction Clinic; NUR Clinic, Amizero (Huye) Disp, Kira (Rusatira) Disp (Private\_Kabutare HD); Urumuri Disp(Private\_Kigeme HD); Impuhwe (Nyanza) Disp (Private\_Nyanza HD); La Charité Disp ,Blessed family health clinicLe Bon Samaritain Disp (Private\_Ruhango HD); ARBEF Karongi(Private\_ Kibuye DH); Clinique de l'ARCHE, Saint Pierre (Rubavu), Charite (Rubavu) Disp, Impuhwe (Rubavu) Disp, Irakiza Disp, Iramiro Clinic(Private\_Gisenyi HD); Mugirubuzima Disp (Private\_Kibogora HD); Ubuzima Disp(Private\_Mibilizi HD)

## Human infection with avian influenza A(H7N9) virus – update

On 20 and 21 February 2014, the National Health and Family Planning Commission (NHFPC) of China notified WHO of nine additional laboratory-confirmed cases of human infection with avian influenza A(H7N9) virus.

Seven of the nine cases are males. The age range is 29 to 81 years. Cases were reported from Anhui (1), Hunan (2), Jilin (1) and Guangdong (5). One case died, six cases are in a critical condition, one case is in a severe condition and one case is in a stable condition. Six cases are reported to have had a history of exposure to live poultry. Investigations are ongoing.

### Details of the cases notified on 20 February are as follows:

- A 64 year-old farmer from Shaoyang City, Hunan Province. He became ill on 9 February, was admitted to a hospital on 15 February and is currently in a critical condition. The patient has a history of exposure to poultry.
- A 29 year-old resident from Changsha City, Hunan Province. She became ill on 8 February, was admitted to a hospital on 16 February and is currently in a critical condition. The patient has a history of exposure to poultry.
- A 79 year-old man from Foshan City, Guangdong Province. He became ill on 10 February, was admitted to a hospital on 14 February and is currently in a severe condition.
- A 60 year-old food handler from Xuancheng City, Anhui Province. He became ill on 13 February, was admitted to a hospital on 19 February and is currently in a critical condition. The patient has a history of exposure to poultry.
- An 81 year-old man who lives in Guangzhou City, Guangdong Province. He became ill on 7 February, was admitted to a hospital on 16 February and is currently in a critical condition. The patient has a history of exposure to poultry.

For further detail, read the link below:

[http://who.int/csr/don/2014\\_02\\_24/en/](http://who.int/csr/don/2014_02_24/en/)

# ANNEX 1: SUMMARY OF CASES NOTIFIED, TIMELINESS AND COMPLETENESS DURING WEEK 07 , 2014

PROVINCE	DISTRICT HOSPITAL	Total Reports Expected	% of Completeness	% of Timeliness	Sum of Blood Diarrhea Cases	Sum of Non Blood Diarrhea Cases	Sum of Cholera Cases	Sum of Meningitis Cases	Sum of Acute Flaccid Paralysis Cases	Sum of Measles Cases	Sum of Neo Natal Tetanus Cases	Sum of E.Typhus Cases	Sum of Y.fever Cases	Sum of H.fever Cases	Sum of Pestis Cases	Sum of Rabies(Dog bites) Cases	Sum of Confirmed Malaria Cases	Sum of Pneumonia Cases	Sum of Influenza Like Illness Cases	Sum of Chickenpox Cases	Sum of Rubella Cases	Sum of Food Poisoning Cases	Sum of Diphtheria cases	Sum of Whooping cough cases	Sum of Typhoid Fever cases	Sum of Mumps Cases	Sum of viral Conjunctivitis cases	
EASTERN PROVINCE	Gahini HD	8	100.0	100.0	0	22	0	0	0	0	0	0	0	0	0	0	326	2	93	0	0	0	0	0	0	0	0	
	Private_ Gahini HD	4	100.0	75.0	0	14	0	0	0	0	0	0	0	0	0	0	31	0	22	0	0	0	0	0	0	0	0	
	Kibungo HD	15	100.0	100.0	0	96	0	0	0	0	0	0	0	0	0	0	656	14	937	0	0	0	0	0	0	0	0	
	Private_ Kibungo HD	3	66.7	66.7	0	23	0	0	0	0	0	0	0	0	0	0	12	0	28	0	0	0	0	0	0	0	0	
	Kirehe HD	16	93.8	75.0	2	244	0	0	0	2	0	0	0	0	0	0	3248	8	1903	1	0	0	0	0	0	0	0	
	Kiziguro HD	12	100.0	100.0	0	110	0	0	0	0	0	0	0	0	0	0	498	2	606	0	0	0	0	0	0	0	0	
	Private_ Kiziguro HD	8	37.5	37.5	0	2	0	0	0	0	0	0	0	0	0	0	91	1	43	0	0	0	0	0	0	0	0	
	Ngarama HD	9	100.0	88.9	0	57	0	0	0	0	0	0	0	0	0	0	256	1	224	0	0	0	0	0	0	0	0	
	Nyagatare HD	22	95.5	68.2	1	231	0	0	0	0	0	0	0	0	0	0	474	7	623	0	0	0	0	0	0	0	0	
	Private_ Nyagatare HD	17	76.5	64.7	0	54	0	0	0	0	0	0	0	0	0	0	51	8	47	0	0	0	0	0	0	0	0	
	Nyamata HD	16	100.0	100.0	6	110	0	0	0	0	0	0	0	0	0	0	2180	1	1351	0	0	0	0	0	0	0	0	
	Private_ Nyamata HD	1	0.0	0.0																								
	Rwamagana HD	16	100.0	100.0	0	76	0	0	0	0	0	0	0	0	0	0	247	45	725	0	0	0	0	0	0	0	0	
	Private_ Rwamagana HD	7	71.4	57.1	0	5	0	0	0	0	0	0	0	0	0	0	26	3	127	0	0	0	0	0	0	0	0	
	Rwinkwavu HD	9	100.0	88.9	0	72	0	0	0	0	0	0	0	0	0	0	599	3	266	0	0	0	0	0	0	0	0	
	Private_ Rwinkwavu HD	3	66.7	66.7	0	7	0	0	0	0	0	0	0	0	0	0	13	0	61	0	0	0	0	0	0	0	0	
KIGALI CITY	CHUK HNR	1	100.0	100.0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	6	0	0	0	0	0	0	0	0	
	Kacyiru Police Hospital	1	100.0	100.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Kanombe Military Hospital HD	1	100.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
	Kibagabaga HD	18	100.0	100.0	1	111	0	0	0	0	0	0	0	0	0	0	290	13	887	0	0	0	0	0	0	0	0	
	Private_ Kibagabaga HD	38	73.7	60.5	1	95	0	0	0	0	0	0	0	0	0	0	105	3	347	3	0	0	0	0	0	0	1	
	King Faisal Hospital	1	0.0	0.0																								
	Masaka HD	10	100.0	100.0	0	64	0	0	0	0	0	0	0	0	0	0	94	6	422	3	0	0	0	0	0	0	0	
	Private_ Masaka HD	17	82.4	70.6	0	18	0	0	0	0	0	0	0	0	0	0	18	2	96	0	0	0	0	0	0	0	0	
	Muhima HD	10	90.0	90.0	10	68	0	0	0	0	0	0	0	0	0	0	143	1	450	4	0	0	0	0	0	0	4	0
	Private_ Muhima HD	39	71.8	51.3	1	60	0	0	0	1	0	0	0	0	0	0	68	17	348	0	0	0	0	0	0	0	0	
	Ndera Hospital	1	0.0	0.0																								
	Butaro HD	18	100.0	100.0	2	109	0	0	0	0	0	0	0	0	0	0	45	5	935	4	0	0	0	0	0	0	0	
	Byumba HD	24	95.8	91.7	1	157	0	0	0	0	0	0	0	0	0	0	53	82	1111	0	0	0	0	0	0	4	0	
	Private_ Byumba HD	8	50.0	37.5	0	6	0	0	0	0	0	0	0	0	0	0	1	0	7	0	0	0	0	0	0	0	0	
	NORTHERN PROVINCE	Kinshira HD	10	100.0	100.0	0	76	0	0	0	0	0	0	0	0	0	0	16	10	294	3	0	0	0	0	0	0	0
		Private_ Kinshira HD	1	100.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
Nemba HD		13	100.0	84.6	0	97	0	0	0	0	0	0	0	0	0	0	28	1	86	1	0	0	0	0	0	2	1	
Ruhengeri HD		15	93.3	73.3	2	160	0	0	0	0	0	0	0	0	0	0	28	42	539	0	0	0	0	0	0	0	0	
Private_ Ruhengeri HD		4	50.0	50.0	0	2	0	0	0	0	0	0	0	0	0	0	6	1	9	0	0	0	0	0	0	0	0	
Ruli HD		8	100.0	62.5	1	44	0	0	0	0	0	0	0	0	0	0	87	1	182	0	0	0	0	0	0	0	0	
Rutongo HD		9	100.0	100.0	0	29	0	0	0	0	0	0	0	0	0	0	176	14	202	0	0	0	0	0	0	0	0	
CHU BUTARE		1	100.0	100.0	0	3	0	0	0	0	0	0	0	0	0	0	15	0	43	0	0	0	0	0	0	0	0	
Gakoma HD		6	100.0	100.0	0	32	0	0	0	0	0	0	0	0	0	0	1643	3	263	0	0	0	0	0	0	0	0	
Private_ Gakoma HD		1	100.0	100.0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	4	0	0	0	0	0	0	0	0	
Gitwe HD		8	100.0	100.0	0	20	0	0	0	0	0	0	0	0	0	0	139	11	141	0	0	0	0	0	0	0	0	
Kabagayi HD		17	94.1	52.9	1	60	0	0	0	0	0	0	0	0	0	0	825	21	691	0	0	0	0	0	0	0	0	
Private_ Kabagayi HD		6	83.3	83.3	0	9	0	0	0	0	0	0	0	0	0	0	48	2	72	0	0	0	0	0	0	0	0	
Kabutare HD		17	100.0	82.4	0	97	0	0	0	0	0	0	0	0	0	0	11	1637	15	702	0	1	0	0	0	0	0	
Private_ Kabutare HD		3	0.0	0.0																								
SOUTHERN PROVINCE		Kaduha HD	9	100.0	77.8	3	35	0	0	0	0	0	0	0	0	0	0	156	1	219	0	0	0	0	0	0	0	0
	Kibilizi HD	9	100.0	100.0	0	105	0	0	0	0	0	0	0	0	0	0	2729	0	533	0	0	0	0	0	0	0	0	
	Kigeme HD	11	100.0	90.9	7	79	0	0	0	0	0	0	0	0	0	0	5	146	13	516	4	0	0	0	0	0	0	
	Private_ Kigeme HD	2	100.0	50.0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	1	0	0	0	0	0	0	0	0	
	Munini HD	17	100.0	100.0	0	73	0	0	0	0	0	0	0	0	0	0	755	2	755	0	0	0	0	0	0	0	0	
	Nyanza HD	17	88.2	82.4	0	57	0	0	0	2	0	0	0	0	0	0	1559	25	466	0	0	0	0	0	0	0	0	
	Private_ Nyanza HD	2	100.0	100.0	0	4	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	
	Remera Rukoma HD	12	100.0	100.0	0	71	0	0	0	0	0	0	0	0	0	0	2401	1	590	0	0	0	0	0	0	0	0	
	Private_ Remera Rukoma HD	2	100.0	100.0	0	1	0	0	0	0	0	0	0	0	0	0	9	0	5	0	0	0	0	0	0	0	0	
	Ruhango HD	8	100.0	100.0	1	43	0	0	0	0	0	0	0	0	0	0	1195	6	371	0	0	0	0	0	0	0	0	
	Private_ Ruhango HD	5	40.0	40.0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	8	0	0	0						