



WEEKLY EPIDEMIOLOGICAL Updates

Week 06, from 03th to 09th February 2014

RBC/IHDPC/ EID Division

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Diseases highlight: Measles

Summary

* 6 cases of cholera: from Bushenge DH (2 cases) and Mukoma HC of Bushenge DH (4 cases); two samples out of four have tested positive for *Vibrio Cholerae Inaba*

* 6 cases of typhoid fever: 1 suspected case from Nemba DH and 5 confirmed cases from Byumba DH

Deaths: Three deaths were reported countrywide of which one was due to malaria, one was due to severe pneumonia while one was due to rabies

The overall completeness and timeliness were 91,6% and 80,9% respectively. For public health facilities completeness was 97,9 % and timeliness was 87,9% while in private health facilities it was 74,6 % and 62,1 % respectively

The following public health facilities did not submit their reports:

Bwisige HC of Byumba DH, Gitarama HC of Kabgayi DH, King Faisal Hospital, Ndera Hospital, Rurenge HC Nyagatare Prison of Nyagatare DH, Nyamata DH, Nyakinama and Shingiro HCs of Ruhengeri DH, Nsinda prison of Rwamagana DH

Contact person

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Introduction

Measles is a highly contagious, serious disease caused by a virus. In 1980, before widespread vaccination, measles caused an estimated 2.6 million deaths each year.

It remains one of the leading causes of death among young children globally, despite the availability of a safe and effective vaccine. Approximately 158 000 people died from measles in 2011 – mostly children under the age of five.

Causative Agent

Measles is caused by a virus in the paramyxovirus family. The measles virus normally grows in the cells that line the back of the throat and lungs. Measles is a human disease and is not known to occur in animals.

Accelerated immunization activities have had a major impact on reducing measles deaths. Since 2000, more than one billion children in high risk countries were vaccinated against the disease through mass vaccination campaigns — about 225 million of them in 2011. Global measles deaths have decreased by 71% from an estimated 548 000 to 158 000.

Signs and symptoms:

The first sign of measles is usually a high fever, which begins about 10 to 12 days after exposure to the virus, and lasts four to seven days. A runny nose, a cough, red and watery eyes, and small white spots inside the cheeks can develop in the initial stage. After several days, a rash erupts, usually on the face and upper neck.

Over about three days, the rash spreads, eventually reaching the hands and feet. The rash lasts for five to six days, and then fades

On average, the rash occurs 14 days after exposure to the virus (within a range of seven to 18 days).

Who is at risk?

Unvaccinated young children are at highest risk of measles and its complications, including death. Unvaccinated pregnant women are also at risk. Any non-immune person (who has not been vaccinated or was vaccinated but did not develop immunity) can become infected.

Measles is still common in many developing countries – particularly in parts of Africa and Asia. More than 20 million people are affected by measles each year. The overwhelming majority (more than 95%) of measles deaths occur in countries with low per capita incomes and weak health infrastructures.

Transmission

The highly contagious virus is spread by coughing and sneezing, close personal contact or direct contact with infected nasal or throat secretions.

The virus remains active and contagious in the air or on infected surfaces for up to two hours. It can be transmitted by an infected person from four days prior to the onset of the rash to four days after the rash erupts.

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Measles surveillance in Rwanda

In Rwanda, case-based notification is conducted by completing a case-based notification form and collecting serum specimen from each suspected case-patient for laboratory confirmation (positive by IgM). During suspected outbreaks, no more than 5 specimens should be collected.

Case definition for health facilities: Any person with fever and generalised maculopapular rash (non vesicular) accompanied by h cough, coryza or conjunctivitis (red eyes).

Case definition for community: Every person with fever, skin rash and red eyes.

Confirmed case: A suspected case with laboratory confirmation (positive IgM antibody) or epidemiological link to confirmed cases in an outbreak

Alert threshold is defined by having less than three confirmed cases while an outbreak threshold is reached when there are at least 3 confirmed cases in a health facility in a week.

Treatment

No specific antiviral treatment exists for measles virus. Severe complications from measles can be avoided though supportive care that ensures good nutrition, adequate fluid intake and treatment of dehydration with WHO-recommended oral rehydration solution. This solution replaces fluids and other essential elements that are lost through diarrhoea or vomiting. Antibiotics should be prescribed to treat eye and ear infections, and pneumonia.

All children diagnosed with measles should receive two doses of vitamin A supplements, given 24 hours apart. This treatment restores low vitamin A levels during measles that occur even in well-nourished children and can help prevent eye damage and blindness. Vitamin A supplements have been shown to reduce the number of deaths from measles by 50%.

Prevention

Routine measles vaccination for children, combined with mass immunization campaigns in countries with high case and death rates, are key public health strategies to reduce global measles deaths. The measles vaccine has been in use for over 40 years. It is safe, effective and inexpensive. It costs less than one US dollar to immunize a child against measles.

The measles vaccine is often incorporated with rubella and/or mumps vaccines in countries where these illnesses are problems. It is equally effective in the single or combined form.

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:

De la Charité(Nyagatare)Disp (Private_Nyagatare HD); Humura(Karembo) Disp (Private_ Kibungo HD; Mamfu Disp,Gakoni Disp, Bugarama PS,Kabeza PS,Ruhuha PS (Private_Kiziguro HD); Ubumwe Disp,Hirwa Disp(Private_Rwamagana HD); NKOMA PS (Private_Nyagatare HD); RUSHENYI PS(Private_Rwinkwavu HD); Apade Clinic,Muvandimvwe Disp,Saint Moise Clinic,Kwizera (Kanombe) Disp,Don de Dieu Clinic(Private_Masaka HD); La Bonne Santé (Kinyinya) Disp ,Ihumure Disp,Umushumba Mwiza Disp,Don de Dieu Disp,Amahoro (Nyarugenge) Disp ,Family care Clinic, POLYCLINIQUE DES 3 AGES,MUHIMA Disp(Private_Muhima HD); Girineza (Kimihurura) Disp, Murakabaho Disp,Amani Disp,Umucyo Disp,Ubuzima bwiza Disp,Doctors plaza Clinic,SANTE FAMILIALE Disp SHA PS,SANTE FAMILIALE Disp, MBANDAZI PS,BUMBOGO PS, GASOGI PS, GIRIMPUHWE (Kimironko) Disp(Private_Kibagabaga HD); Nyamagumba clinic,Les 3 Colombes Clinic(Private_Ruhengeri HD); NUR Clinic(Private_Kabutare HD); Isange Disp, Impuhwe (Nyanza) Disp (Private_Nyanza HD); Urumuri Disp(Private_Kigeme HD); Amizero (Huye) Disp (Private_Kabutare HD); La Benediction Clinic (Private_Kabgayi HD); (La Charité Disp(Private_Ruhango HD); Ubuzima Disp(Private_Mibilizi HD); Vunga Disp(Private_Shyira HD); Clinique de l'ARCHE,Saint Pierre (Rubavu),Impuhwe (Rubavu) Disp, Irakiza Disp, Iramiro Clinic(Private_Gisenyi HD)

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

On 12 February 2014, The Ministry of Health (MOH) Malaysia reported a human case of avian influenza A(H7N9) virus.

Details of the case are as follows:

A 67 year old woman tourist from Guangdong Province, China, arrived in Malaysia on 3 February in a tour group of 17 persons, including relatives, and stayed overnight in Kuala Lumpur, Malaysia. The tour group then went on a visit to Sabah, Malaysia from 4 to 6 February. On 7 February, she was admitted to hospital and later transferred to another hospital in Sabah. The patient is currently in a stable condition.

Four days prior to travelling to Malaysia, on 30 January 2014, she was treated in China for symptoms of fever, cough, flu, fatigue and joint pain. Given the onset of symptoms, and travel dates, the most likely exposure occurred before arrival in Malaysia.

For further details, read the link below:

http://who.int/csr/don/2014_02_17/en/index.html

ANNEX 1: SUMMARY OF CASES NOTIFIED, TIMELINESS AND COMPLETENESS DURING WEEK 06 , 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	25	0	0	0	0	0	0	0	0	0	0	386	5	176	5	0	0	0	0	0	0	0	
	Privés_Gahini HD	4	100.0	100.0	0	27	0	0	0	0	0	0	0	0	0	0	42	0	15	0	0	0	0	0	0	0	0	
	Kibungo HD	15	100.0	93.3	0	163	0	0	0	0	0	0	0	0	0	0	813	19	1021	0	0	0	0	0	0	0	0	
	Privés_Kibungo HD	3	66.7	66.7	0	31	0	0	0	0	0	0	0	0	0	0	9	0	28	0	0	0	0	0	0	0	0	
	Kirehe HD	16	100.0	81.3	1	251	0	0	0	2	0	0	0	0	0	0	3529	6	1805	2	0	0	0	0	0	0	0	
	Kiziguro HD	12	100.0	91.7	0	94	0	0	0	0	0	0	0	0	0	0	503	5	589	0	0	0	0	0	0	0	0	
	Privés_Kiziguro HD	8	37.5	25.0	0	3	0	0	0	0	0	0	0	0	0	0	40	0	105	0	0	0	0	0	0	0	0	
	Ngarama HD	9	100.0	100.0	0	66	0	0	0	0	0	0	0	0	0	0	288	4	160	0	0	0	0	0	0	0	0	
	Nyagatare HD	22	90.9	68.2	0	228	0	0	0	1	0	0	0	0	0	0	576	7	599	0	0	0	0	0	0	0	0	
	Privés_Nyagatare HD	17	88.2	64.7	0	75	0	0	0	0	0	0	0	0	0	0	74	2	78	0	0	0	0	0	0	0	0	
	Nyamata HD	16	93.8	93.8	0	97	0	0	0	0	1	0	0	0	0	0	2315	9	1107	0	0	0	0	0	0	0	0	
	Privés_Nyamata HD	1	100.0	100.0	0	8	0	0	0	0	0	0	0	0	0	0	8	1	15	0	0	0	0	0	0	0	0	
	Rwamagana HD	16	93.8	75.0	0	76	0	0	0	0	0	0	0	0	0	0	370	5	735	0	0	0	0	0	0	0	0	
	Privés_Rwamagana HD	7	71.4	57.1	0	16	0	0	0	0	0	0	0	0	0	0	16	2	12	0	0	0	0	0	0	0	0	
	Rwinkwavu HD	9	100.0	100.0	0	65	0	0	0	0	0	0	0	0	0	0	707	5	279	0	0	0	0	0	0	0	0	
KIGALI CITY	Privés_Rwinkwavu HD	3	66.7	66.7	0	5	0	0	0	0	0	0	0	0	0	0	11	0	41	0	0	0	0	0	0	0	0	
	CHUK HNR	1	100.0	100.0	0	3	0	0	0	0	0	0	0	0	0	0	6	2	7	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	
	Rwanda Militar Hospital	1	100.0	0.0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Kibagabaga HD	18	100.0	100.0	1	143	0	0	0	0	0	0	0	0	0	0	341	13	1058	0	0	0	0	0	0	0	0	
	Privés_Kibagabaga HD	38	65.8	52.6	3	90	0	0	0	0	0	0	0	0	0	0	70	11	339	2	0	0	0	0	0	1	0	
	King Faisal Hospital	1	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Masaka HD	10	100.0	100.0	0	42	0	0	1	0	0	0	0	0	0	0	102	8	348	0	0	0	0	0	0	0	0	
	Privés_Masaka HD	17	70.6	58.8	0	21	0	0	0	0	0	0	0	0	0	0	20	0	119	0	0	0	0	0	0	0	0	
	Muhima HD	10	100.0	100.0	1	78	0	0	0	0	0	0	0	0	0	0	158	10	480	1	0	0	0	0	0	1	0	
	Private_Muhima HD	39	79.5	69.2	0	117	0	0	0	2	0	0	0	0	0	0	75	10	452	0	0	0	0	0	0	1	0	
	Ndera Hospital	1	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Butaro HD	18	100.0	100.0	3	137	0	0	0	0	0	0	0	0	0	0	45	3	970	5	0	0	0	0	0	0	0	
	Byumba HD	24	95.8	91.7	5	153	0	0	0	0	0	0	0	0	0	0	1	57	101	1241	0	0	0	0	0	5	0	
	NORTHERN PROVINCE	Privés_Byumba HD	8	100.0	75.0	0	44	0	0	0	0	0	0	0	0	0	0	4	1	25	0	0	0	0	0	0	0	0
Kinshira HD		10	100.0	100.0	0	28	0	0	0	0	0	0	0	0	0	0	16	8	279	0	0	0	0	0	0	0	0	
Privés_Kinshira HD		1	100.0	100.0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	
Nemba HD		13	100.0	84.6	0	80	0	0	0	0	0	0	0	0	0	0	47	5	122	0	0	0	0	0	1	0	0	
Ruhengeri HD		15	86.7	73.3	1	125	0	0	0	0	0	0	0	0	0	0	32	33	539	0	0	0	0	0	0	0	0	
Privés_Ruhengeri HD		4	50.0	50.0	0	2	0	0	0	0	0	0	0	0	0	0	7	0	6	0	0	0	0	0	0	0	0	
Ruli HD		8	100.0	87.5	3	50	0	0	0	0	0	0	0	0	0	0	99	3	170	2	0	0	0	0	0	1	0	
Rutongo HD		9	100.0	88.9	0	43	0	0	0	1	0	0	0	0	0	0	172	4	204	0	0	0	0	0	0	0	0	
CHU BUTARE		1	100.0	100.0	0	5	0	0	0	0	0	0	0	0	0	0	0	41	0	40	0	0	0	0	0	0	0	
Gakoma HD		6	100.0	83.3	0	38	0	0	0	0	0	0	0	0	0	0	0	1510	1	312	0	0	0	0	0	0	0	
Privés_Gakoma HD		1	100.0	100.0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	
Gitwe HD		8	100.0	100.0	0	26	0	0	0	0	0	0	0	0	0	0	133	16	160	0	0	0	0	0	0	0	0	
Kabgayi HD		17	94.1	64.7	0	63	0	0	0	0	0	0	0	0	0	0	718	8	579	0	0	0	0	0	0	0	0	
SOUTHERN PROVINCE		Privés_Kabgayi HD	6	83.3	66.7	0	22	0	0	0	0	0	0	0	0	0	0	43	2	59	0	0	0	0	0	0	0	0
		Kabutare HD	17	100.0	58.8	0	112	0	0	0	0	0	0	0	0	0	0	1839	6	667	0	0	0	0	0	0	0	0
	Privés_Kabutare HD	3	33.3	33.3	0	1	0	0	0	0	0	0	0	0	0	0	4	0	7	0	0	0	0	0	0	0	0	
	Kaduha HD	9	100.0	77.8	1	21	0	0	0	0	0	0	0	0	0	0	126	1	248	0	0	0	0	0	0	0	0	
	Kibizi HD	9	100.0	88.9	0	82	0	0	0	0	0	0	0	0	0	0	3123	1	647	0	0	0	0	0	0	0	0	
	Kigeme HD	11	100.0	81.8	1	67	0	0	0	1	0	0	0	0	0	0	174	15	538	3	0	0	0	0	0	0	0	
	Privés_Kigeme HD	2	100.0	50.0	0	0	0	0	0	0	0	0	0	0	0	0	7	3	0	0	0	0	0	0	0	0	0	
	Munini HD	17	100.0	100.0	0	90	0	0	0	0	0	0	0	0	0	0	774	5	731	1	0	0	0	0	0	0	0	
	Nyanza HD	17	100.0	88.2	4	92	0	0	0	0	1	0	0	0	0	0	1780	16	530	0	0	0	0	0	0	0	0	
	Privés_Nyanza HD	2	50.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	8	0	0	0	0	0	0	0	0	
	Remera Rukoma HD	12	100.0	100.0	0	66	0	0	0	0	0	0	0	0	0	0	2004	0	605	0	0	0	0	0	0	0	0	
	Privés_Remera Rukoma HD	2	100.0	100.0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	8	1	0	0	0	0	0	0	0	
	Ruhango HD	8	100.0	100.0	0	59	0	0	0	0	0	0	0	0	0	0	899	16	323	1	0	0	0	0	0	0</		