RWANDA WEB

Weekly Epidemiological Bulletin

TRAC Plus

Epidemic Infectious Disease Unit

Week ending on 04 /01/09 (1st Week)

Weekly epidemiological bulletin Year 2009, week 1

A. Introduction

In this year's issues of the Weekly Epidemiological Bulletin we shall discuss in simple terms various topics that are relevant to our work in surveillance and in the control of epidemic diseases. The purpose is to equip each and every one of us with the appropriate knowledge and skills in an attempt to build a formidable team to confront the challenges that are posed by the numerous outbreaks in our days. It is our keen hope that recipients of the bulletin, particularly those whose mandate has to do with disease control will spend some time to read these portions (which will usually come after a summary of the weekly report) and give us feedback. To make it easy to read and understand, the topics are broken down into short pieces. We look forward to your comments and suggestions.

B. Summary

For the first week in the year 2009, about 66% (27/41) of District Hospitals submitted reports on Epidemic Infectious Diseases. These facilities reported on all the weekly reportable diseases. The following district hospitals failed to submit weekly reports: Kanombe, Nyamata, Gahini, Kiziguro, Kaduha, Kigeme, Kibirizi, Nyanza, Bushenge, Kibogora, Kabaya, Byumba and Buraro.

1. Cholera

- A Cholera outbreak is ongoing in Musanze District in the Northern Province. For the week under review, a total of 25 cases and 1 death were reported from Ruhengeri Hospital ,giving a case-fatality rate of 4%.

2. Meningitis

- Two cases of Meningitis were reported from CHUK. The disease specific case fatality rate for the week is zero.

3. Diarrheal Disease

- For bloody and non-bloody diarrheal diseases, a total of 322 and 1,706 cases, respectively were reported. There were no fatalities.

4. Malaria

- A total of 11, 695 cases of malaria were reported for the week. Out of this, 44% (5,145) and (56%) 6,550 cases were presumed and confirmed malaria respectively. One death was reported. The case fatality rate was 0.009%.

5. Lower Respiratory Tract Infection

- A total of 1997 cases were reported with no deaths.

6. Others

- For the 27 hospitals, there was zero reporting for the other reportable diseases.

Topic of the week: What is an Outbreak or an Epidemic?

The terms outbreak and epidemic are used interchangeably in field epidemiology. An outbreak or an epidemic is defined as the occurrence of **more** cases of a disease **than expected** in a **given area** among a **specific group** of people over a **particular period of time.** The number of cases that are expected to be present in any population at any point

in time depends on the disease. For some diseases such as cholera, yellow fever and the viral haemorrhagic fevers, the expected number of cases at any point in time is zero. In other words, we don't expect any case of the above mentioned diseases to be present in any population. Therefore, the occurrence of even a single case of these diseases would constitute an outbreak or an epidemic. For diseases such as meningitis, measles etc you need to get to a certain number of cases before you can declare an epidemic. However, in the eradication phase even a single case can constitute an epidemic. The numbers of cases you are supposed to get before you declare an epidemic is called the **epidemic threshold.** This level varies from disease to disease.

It is important to note that when an outbreak /epidemic is declared, we are in a serious situation and whatever we do during the outbreak period should **not** be business as usual. An outbreak is a public health emergency requiring prompt and appropriate interventions. The failure to institute effective interventions will result in high morbidity and mortality. Clearly, an outbreak is an economic emergency. Substantial amounts of resources are required to control the outbreak. Also victims of the outbreak and their caretakers cannot work during the period of sickness and therefore might not be able to earn income during this period. Inability to control an outbreak of a deadly disease such as Ebola, Marburg, etc may have serious economic effect because the reaction of business and tourists. Definitely an outbreak is a political emergency and an unusual event. Remember that the declaration of an outbreak is a call to act swiftly and a time to sacrifice a little bit more of our comfort for the greater good of our nation and of mankind.

(*In the next issue we shall discuss the topic:" How Do We Detect Outbreaks?")*

For comments, suggestions and observations
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Table 1: Epidemic Infectious Diseases Reported by District Hospitals in Rwanda, 1st Epidemiological Week, 2009

Semaine du29 Dec au 4 Jan 09			Diar S.		Diar N S.		Choléra		Méningite		PFA		Rougeole			TNN			T. EPID		F.Jaune		F. Hém		Peste		Rage		P. P		P.C		IRA	
	Districts	Hôpitaux	Cas	Dc	Cas	Dc	Cas	Dc	Cas	Dc	Cas	Dc	vac	Cas	Dc	vac	Cas	Dc	Cas	Dc	Cas	Dc	Cas	Dc	Cas	Dc	Cas	Dc	Cas	Dc	Cas	Dc	Cas	Dc
NORD	Musanze	Ruhengeri	14	0	253	0	25	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	184	0	42		nd	nd
	Burera	Butaro																															nd	nd
	Gicumbi	Byumba																															nd	nd
	Rulindo	Rutongo	14	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102	0	344	0		
	Gakenke	Nemba	5	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	5	0	36	0	105	0
		Ruli	19	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	56	0	90	0
OUEST	Rubavu	Gisenyi	18	0	132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	0	4	0	nd	nd
	Nyabihu	Shyira	7	0	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	0	20	0	105	0
	Rutsiro	Murunda	12	0	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	0	12	0	nd	nd
	Ngororero	Kabaya																															nd	nd
		Muhororo	5	0	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149	0	16	0	nd	0
	Karongi	Kibuye	16	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	0	23	0	nd	nd
		Kilinda	2	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	0	8	0	38	0
		Mugonero	1	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	0	10	0	60	0
	Nyamasheke	Kibogora																															nd	nd
		Bushenge																																
	Rusizi	Mibilizi	6	0	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	289	0	324	0	nd	nd
		Gihundwe	4	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	55	0	16	0	nd	nd
SUD	Muhanga	Kabgayi	37	0	97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113	0	115	0	nd	nd
	Kamonyi	Remera ruk.	12	0	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147	0	545	0	nd	nd
	Ruhango	Gitwe	11	0	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	494	0	140	0	132	0
	Nyanza	Nyanza																															nd	nd
	Huye	Kabutare	39	0	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	320	0	837	0	nd	nd
	Gisagara	Kibilizi																															nd	nd
		Gakoma	10	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97	0	271	0	nd	nd
	Nyaruguru	Munini	13	0	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		145	0	209	0	767	0
	Nyamagabe	Kigeme																															nd	nd
		Kaduha																																
EST	Nyagatare	Nyagatare	27	0	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1065	0	1333	0	nd	nd
	Gatsibo	Kiziguro																															nd	nd
		Ngarama	3	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	440	0	815	0		
	Kayonza	Rwinkwavu	3	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128	0	435	0	nd	
		Gahini																															nd	nd
	Rwamagana	Rwamagana	14	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	359	0	516	0	nd	nd
	Ngoma	Kibungo	12	0	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	307	0	367	0	nd	nd
	Bugesera	Nyamata																																
	Kirehe	CS Kirehe	25	0	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	253	0	413	0	189	0
KIGALI	Gasabo	Kibagabaga	15	0	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	215	0	396	0	210	0
	Kicukiro	Kanombe																															nd	nd
		CHUK	0	0	6	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	4	0	nd	nd
	Nyarugenge	Muhima	6	0	127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	290	0	119	0	361	0
	Total		350	0	2023	0	25	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5534	0	7426	0	2057	0