Ministry of Health Uganda

Weekly Epidemiological Bulletin

Epidemiological week 47 of 2013 [18 – 24 November 2013]

National Summary

Indicator	Epidemiological week 47		
	2013	2012	Median 2008-2012
% of Districts reporting	99.11	89.29	
% HU reporting	44	57	
% Timely District reports	99.11	79.46	
AFP	1(0)	2(0)	
Animal bites	314(01)	314(01)	
Cholera	2(0)	5(0)	
Dysentery	781(01)	1068(0)	
Guinea Worm	0(0)	0(0)	
Malaria	163,932 (36)	196,450 (39)	
Measles	26(0)	73(0)	
Meningitis	2(0)	5(0)	
NNT	1(0)	2(01)	
Plague	0(0)	0(0)	
Typhoid	1106(0)	1143(0)	
S/Sickness	0(0)	0(0)	
Human Influenza	3(0)	0(0)	
Nodding Syndrome	0(0)	0(0)	
Yellow Fever	0(0)	0(0)	
Viral Hemorrhagic Fever	0(0)	0(0)	
Maternal Deaths	7	---	

Highlights of the Week

Completeness & Timeliness of Reporting

This week, 111 (99.11%) of the districts submitted their weekly reports as opposed to 100 (89.29%) for the corresponding week of 2012. The mean intra-district completeness this week is 44% [median 44%]; compared to the mean intra-district completeness of 57% [median 77.5%] for the corresponding week of 2012.

Only 15 (13.51%) of the districts that reported this week attained an intra-district completeness of at least 80% as opposed to 37 (37%) for the corresponding week of 2012. Only **one (1) district [Agago]** ***never submitted reports this week*** [see annex 1].

Timeliness for weekly reporting is 111 (99.11%) for the reporting week; and 89 (79.46%) for the corresponding week of 2012.

The proportion of health facilities submitting weekly reports in each of the reporting districts is way below the national target of 80% in most of the districts. DHOs are urged to ensure districts submit their weekly reports and to actively follow-up silent health facilities.

Public Health Emergencies/Disease Outbreaks

Nodding Syndrome [NS]: Preliminary findings from a community survey undertaken during 2012/13 with the aim of determining the prevalence of nodding syndrome in the districts of Kitgum, Lamwo, & Pader shows that there are a total of **1,782 (CI 1,552 – 2,011) suspect NS cases** between ages **5 – 18 years**, of which **1,687 (CI 1463 – 1,912) were considered probable NS cases**. A total of **178 NS deaths** had occurred since the initial cases in the late 1990s.

Viral Hemorrhagic Fever [VHF]: A suspect VHF case was reported by Bombo GMH on 29/11/2013 with complaints of fever, general body weakness, headache, sore throat, and bleeding [injection sites, hematemesis-coffee grounds, hematuria, bloody stools] since 25/11/2013. The patient is isolated and his samples tested negative for Ebola by PCR. Results from additional testing will be reported in due course.

Multi-Drug Resistant Tuberculosis [MDR-TB]: During 2013, 129 new MDR-TB cases have been detected with the new cases reported during the months of June, August, & September exceeding the median number of cases for the corresponding months of 2008-2012 **(details on page 6-8).**

Acute Jaundice Syndrome [AJS] – Napak & Lamwo districts: Further to our update during epidemiological week 45; three samples from the acute jaundice syndrome cases in Napak tested positive for Hepatitis E Virus [HEV] by PCR. The district has finalized a response plan to support local investigations and response.

The two samples from Palabek Ogili in Lamwo that were IgM positive for Zika and Yellow Fever are still undergoing confirmatory testing [Plaque Reduction Neutralization Testing-PRNT] at the arboviral laboratory in UVRI.

Plague surveillance – West Nile: Starting July 2013, the UVRI/CDC Plague program initiated the "Rat fall surveillance project". The project aims to detect & control rodent epizootics before they spillover to humans. Four epizootics have been confirmed in Bondo village, Lazebu village, Aiivu-Logiri, Kingogo village (Vura sub-county), and more recently in Opia centre village (Zombo district). IRS has been finalized in Lio & Eloko villages in Logiri sub-county, Arua district where up to 744 huts were sprayed during November 22-23, 2013. However, IRS still pending in Opia centre & two villages in Vurra sub-county, where plague precipitated rodent die-offs were recently reported.

Cholera - National: This week, Nebbi district reported two (2) cholera cases. The cumulative number of districts affected by cholera this year is **ten (10)** with a cumulative total of **737** cases and **26** deaths (details annex 2).

Polio Alert- National: Due to the ongoing Polio outbreak in the Horn of Africa countries [Somalia, Ethiopia, & Kenya]; Uganda has implemented two rounds of SIAs with the most recent being conducted during October 19-21, 2013 in 47 districts.

Human Influenza Surveillance - National: **The National Influenza Centre in the Uganda Virus Institute [UVRI] & Makerere University Walter Reed Project** [MUWRP] maintain sentinel surveillance sites for ILI/SARI countrywide. As of 29th November 2013; a total **of 3315 specimens** had been analyzed [by NIC till Epi-week 46 & MUWRP till Epi-week 47] with **313 isolates**.

Middle East Respiratory Syndrome Coronavirus (MERS-CoV): Heightened surveillance for Severe Acute Respiratory Infections (SARI) is also ongoing after **160 cases & 68 deaths of MERS-CoV** were **r**eported largely from the Middle East**.** Healthcare workers are urged to look out for cases of SARI or severe pneumonia requiring hospitalization especially among international travelers from the Middle East (like Pilgrims returning from Mecca - Saudi Arabia). These cases should be isolated immediately and reported to NIC-UVRI [0752650251 or 0772477016] for immediate investigation.

The Ministry of Health Emergency Operations Centre (EOC): To streamline notifications, investigation, and response to disease outbreaks in Uganda, the Ministry of Health working with partners [CDC & WHO] are in the final stages of establishing the EOC. **Read attached EOC brochure…**

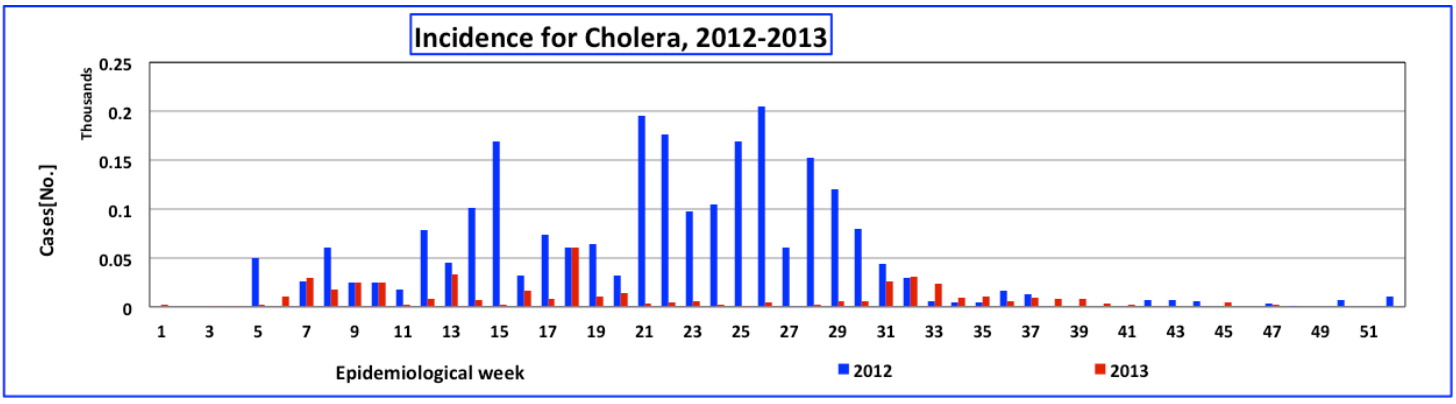
Weekly Incidence for Selected Priority Diseases in the Country

This week; we present a concise profile of eleven (11) top priority diseases/conditions including AFP (suspect Polio), Cholera, Bloody diarrhea, Malaria; Meningitis, Measles, Suspect Rabies, Typhoid Fever, Maternal deaths, Human Influenza, & MDR-TB] reported during the 47th Epidemiological week of 2013.

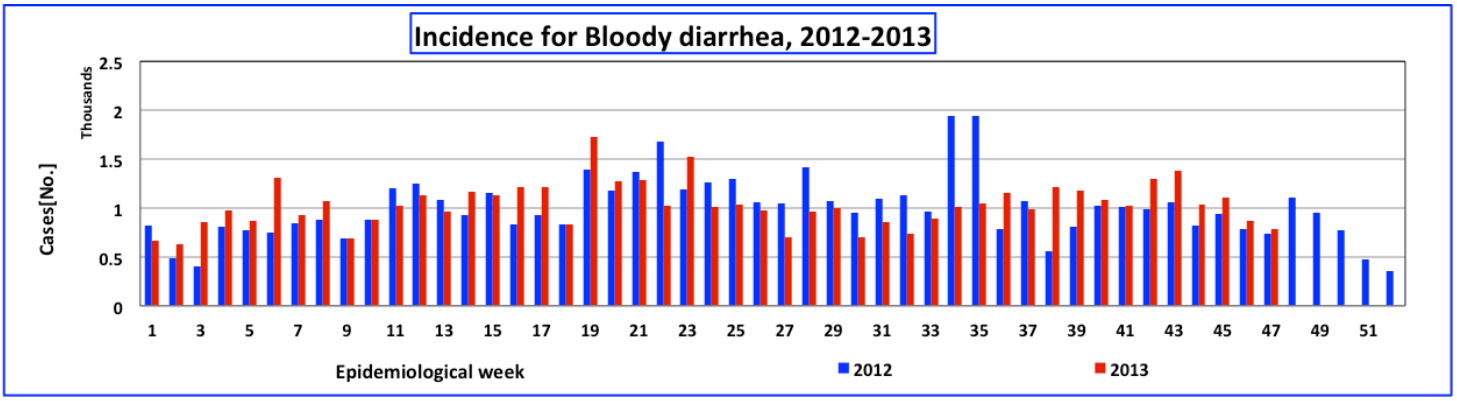
AFP (Suspect Polio): One AFP case was reported from Kween district this week. The National non-Polio AFP (NPAFP) rate for 2013 is 2.26/100,000 children <15 years of age, which is below the national target of ≥4/100,000. Only 27 (24.10%) of districts have archived a NPAFP rate of 4/100,000 population <15 years. The non-Polio *Enterovirus* (NPEV) isolation rate (a measure of the quality of the specimen cold chain) is 12% above the national target of ≥10%. Also, 89% of AFP cases have had at least two (2) stool specimens collected within 14 days of paralysis onset (national target ≥80%).

In light of the ongoing Polio outbreak in the Horn of Africa; AFP surveillance has been enhanced; regional surveillance review meetings have been conducted; and cross-border surveillance committees and micro-plans have been developed. Additionally, two rounds of SIAs have also been implemented with the most recent conducted during October 19-21, 2013 in 47 districts.

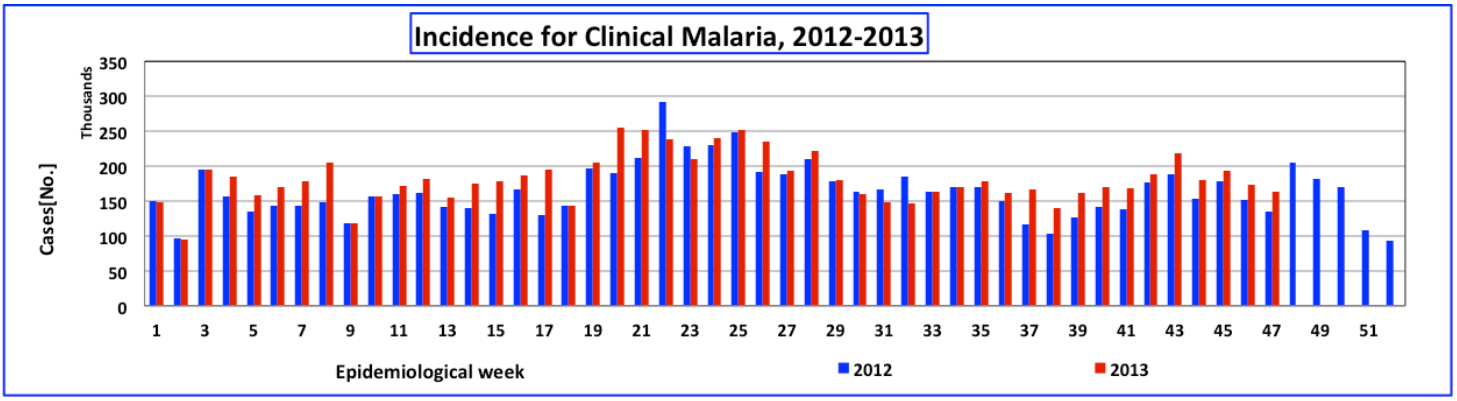
Cholera: This week, Nebbi district reported two (2) cholera cases. Cholera transmission usually peaks during the rainy season. Districts are therefore urged to enhance hygiene and sanitation promotion awareness in at-risk and affected communities. The figure below shows the cholera trends for 2012 & 2013 [see annex 2].



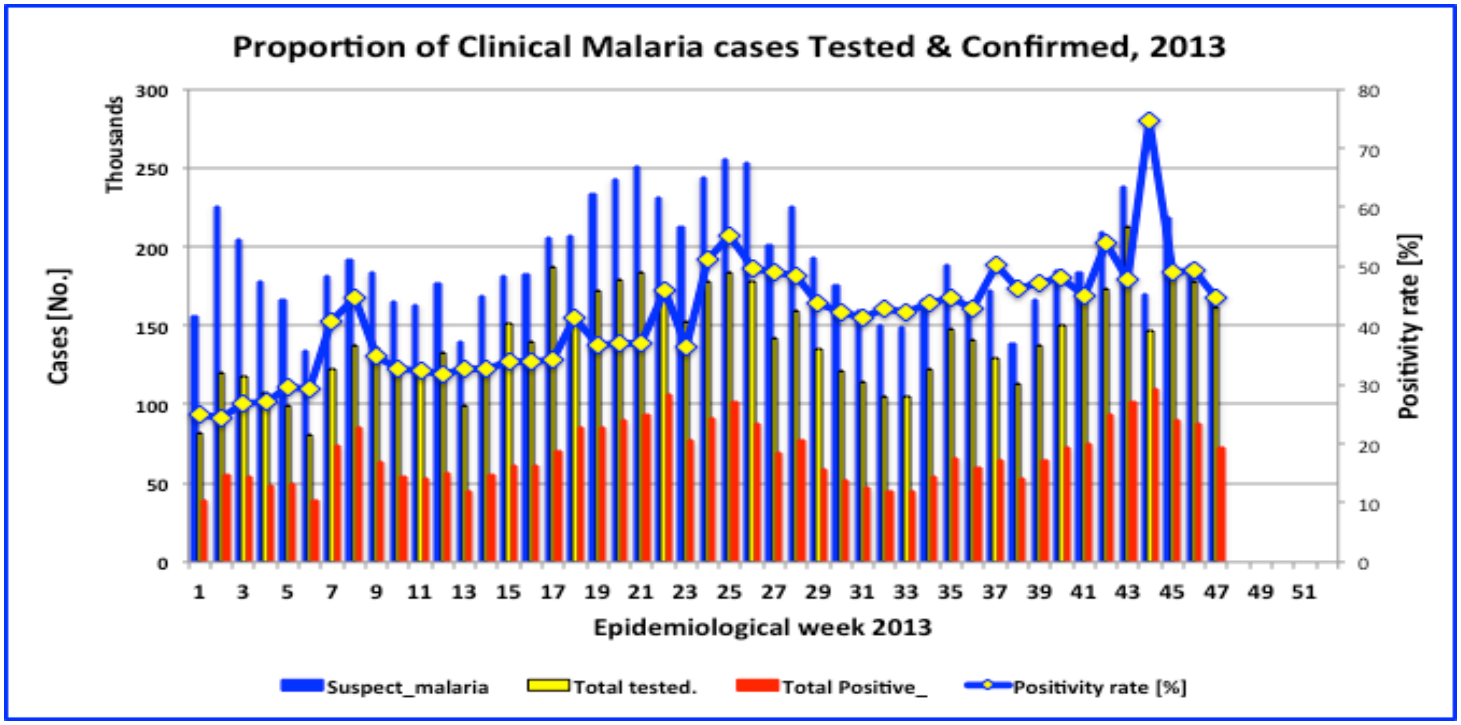
Dysentery (Bloody diarrhea): A total of 781 cases including one death of bloody diarrhea were reported from 86 districts during the current week. This translates into a national weekly incidence of 2.46 cases of bloody diarrhea per 100,000. The top 10 districts [Masaka, Kapchorwa, Kotido, Kalangala, Nebbi, Bukwo, Amolatar, Moyo, Bundibugyo, & Adjumani] had a weekly incidence of 10.86-31.31 bloody diarrhea cases per 100,000. The figure below shows the number of bloody diarrhea cases reported by week for 2012 & 2013 [annex 1 for district specific reports].



Malaria: Is the commonest cause of morbidity and mortality in the country; thus this week, 163,938 clinical malaria cases including 36 deaths were reported from the 111 districts that submitted weekly reports. The figure below shows the number of clinical malaria cases reported to the MoH by week for 2012 & 2013 [annex 1 for district specific reports].



The figure below shows the proportion of clinical malaria cases that have been tested and confirmed by week during 2013 using malaria laboratory data submitted through mTrac and DHIS 2. During the current week [47th Epidemiological week], a total of 167,139 suspect malaria cases were reported from the 108 districts that submitted laboratory-testing data [through mTrac or DHIS2]. 161,984 of the suspect malaria cases were tested [RDT/microscopy] with 72,462 (44.73%) being confirmed to have malaria. Children under five years constituted 33.22% (24,071) of the malaria confirmed cases. The graph below shows the trends for the proportions of clinical malaria cases tested and confirmed during 2013.



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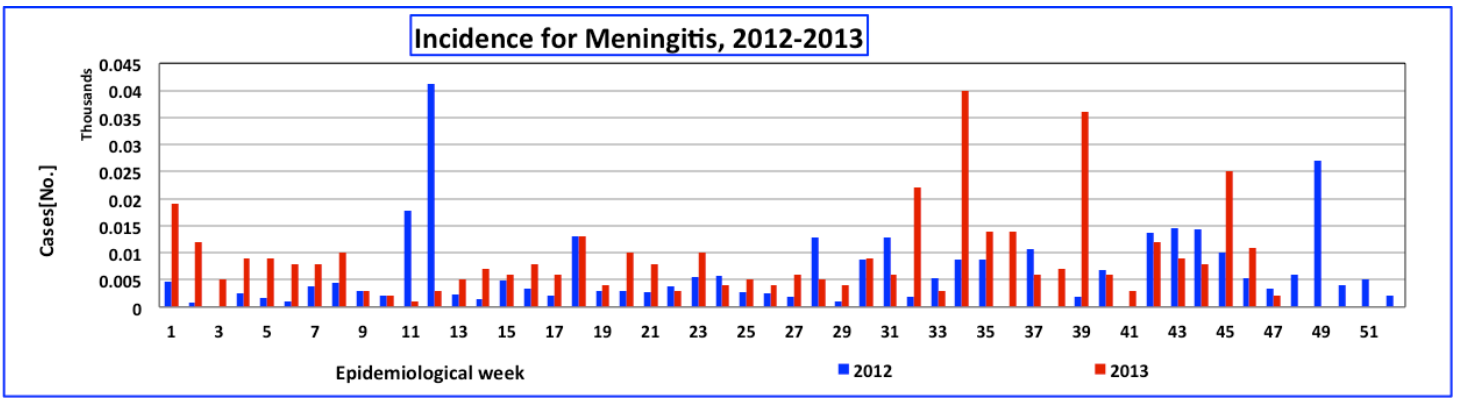
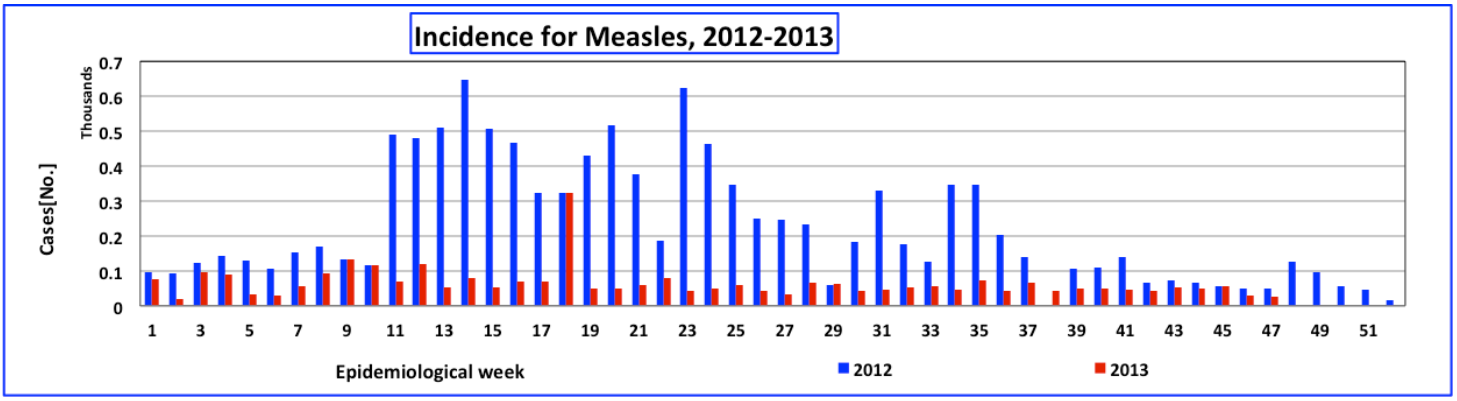
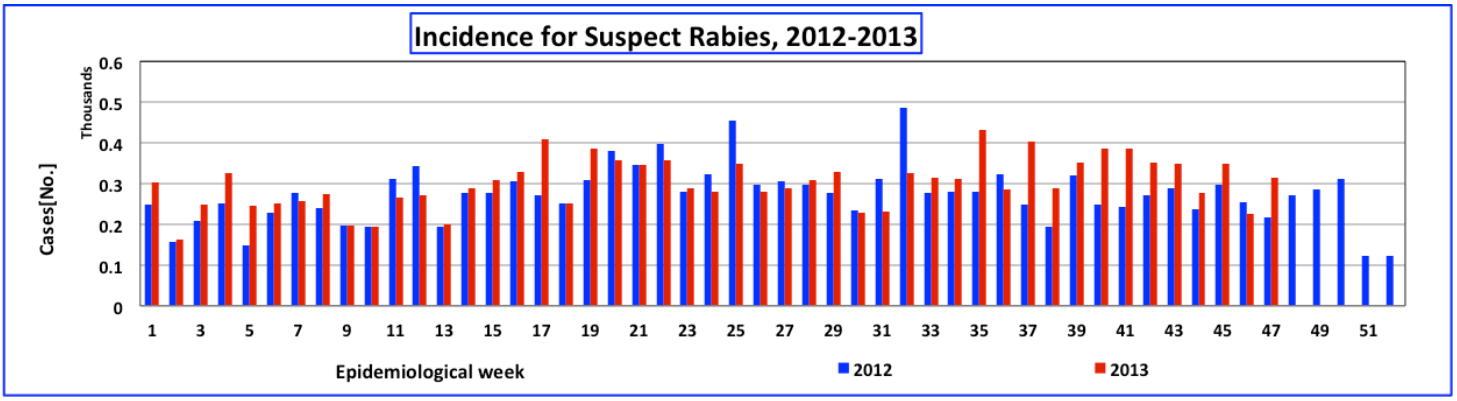
Meningitis: This week, a total of two (2) cases were reported from two (2) districts [Buvuma & Nakaseke]. The figure below shows the number of meningitis cases reported by week for 2012 & 2013 [annex 1 for district specific reports].



Measles: This week, a total of 26 suspect measles cases were reported from 15 districts. As of 10th November 2013, a total of 98 (87.5%) districts had investigated at least one suspect measles case. Consequently, the annualized rate for suspect measles cases investigated is 3.24/100,000 (national target 2/100,000). As of 10th November 2013, data from the EPI/UVRI laboratory showed that 9% of investigated suspect measles cases had tested measles IgM positive [measles cases have been confirmed from 27districts]. Of the ten (10) suspect measles outbreaks reported this year; **eight (8) measles outbreaks** have been confirmed in **Hoima**, **Kabarole**, **Isingiro**, **Mubende**, **Kyenjojo, & Kamwenge** districts. The trends for the current period are generally far below the cases reported for the corresponding period of 2012. The figure below shows the number of suspect measles cases reported by week for 2012 & 2013 [annex 1 for district specific reports].



Animal bites (Suspect human rabies): A total of 314 cases of suspect rabies and one (1) death were reported from 64 districts during the current week. This translates into a national weekly incidence of 0.99 suspect rabies cases per 100,000. The top 10 districts [Ntungamo, Kapchorwa, Mbale, Kumi, Mubende, Bukwo, Moroto, Lira, Ibanda, & Tororo] had a weekly incidence of 3.67-8.33 suspect rabies cases per 100,000 [annex 1 for district specific reports]. Ministry of Health in collaboration with CDC has completed the rabies survey in the districts of Kampala, Wakiso, Bundibugyo, Kabarole, & Mbale. The aim of the survey was identify the determinants of the rampant animal bites in the selected districts. Data analysis is already underway.



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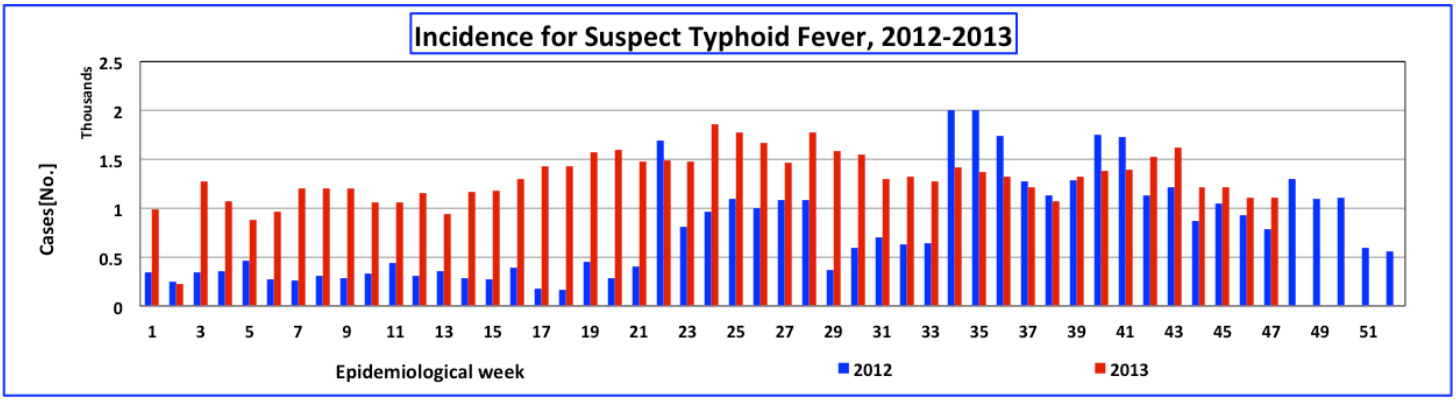
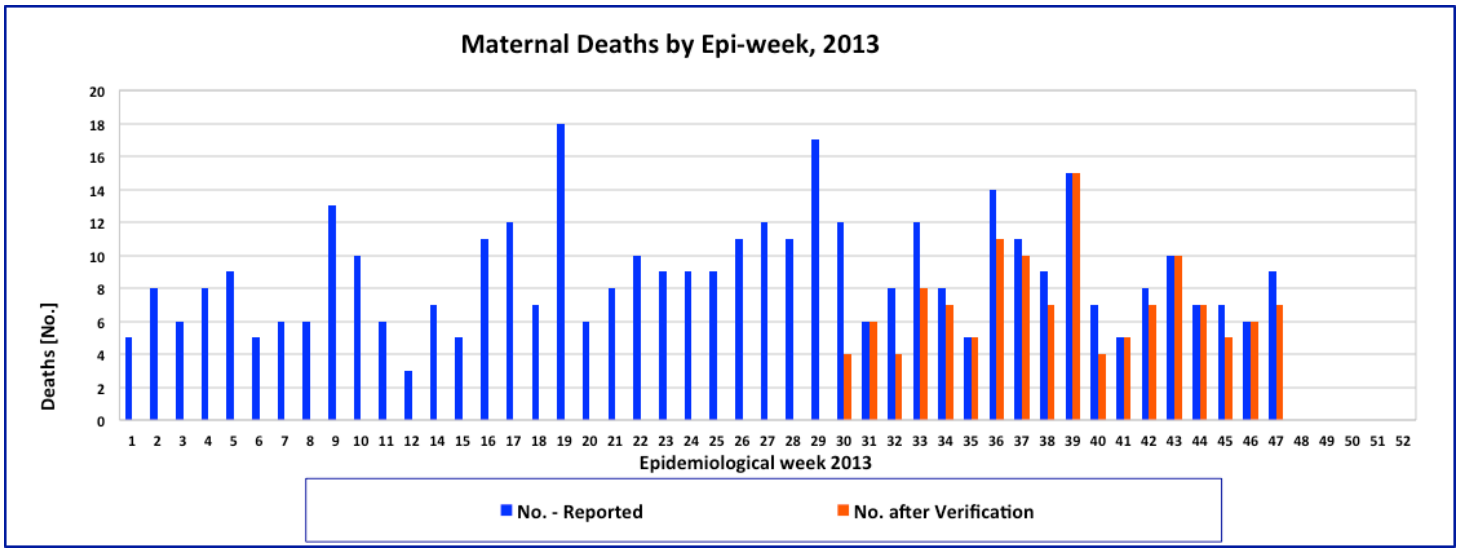
Typhoid Fever: A total of 1106 suspect typhoid fever cases were reported from 74 districts during the current week. This translates into a national weekly incidence of 3.48 cases per 100,000. The top 10 districts [Bukwo, Mbale, Kumi, Kiboga, Kotido, Lyantonde, Kyankwanzi, Mbarara, Mityana, & Nakasongola] had a weekly incidence of 12.52-91.85 cases per 100,000. The figure below shows the number of Typhoid fever cases reported by week for 2012 & 2013 with the cases reported since the beginning of 2013 greatly exceeding those from the corresponding period of 2012 [annex 1 for district specific reports].



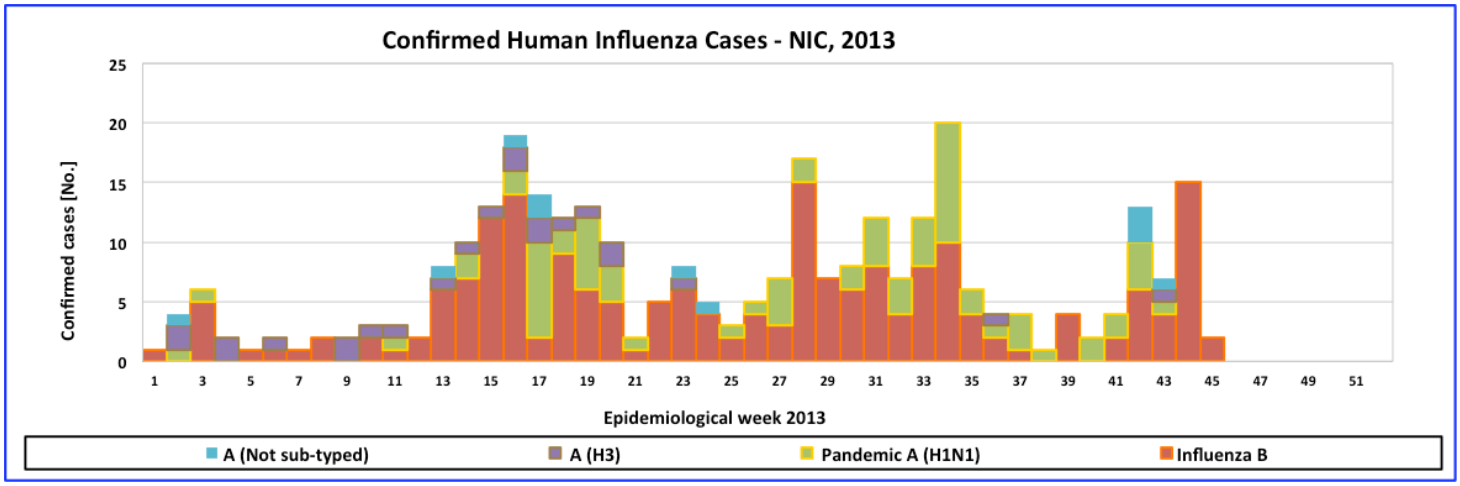
Maternal deaths: Maternal mortality trends are a national priority and consequently, these data are now submitted on a weekly basis by the health facilities where these events are detected.



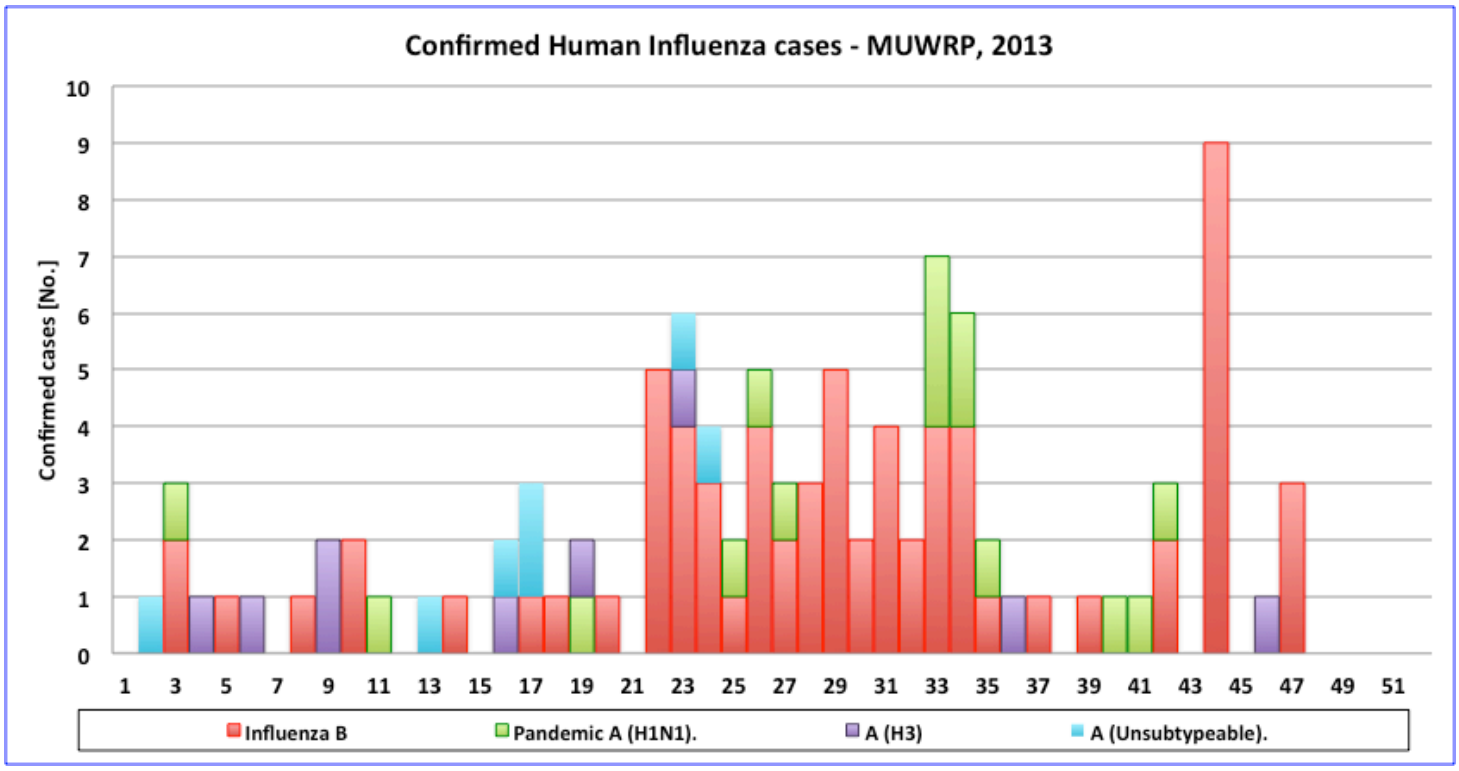
This week a total of **seven (7) maternal deaths** were reported from **(6) districts** as shown in the table below.

Epi week	Reporting Date	District	Facility	No. deaths	Comments
47	25/11/2013	Hoima	Hoima REGIONAL REF HOSPITAL	2	
47	27/11/2013	Mubende	Mubende RGIOANL REF HOSPITAL	1	
47	26/11/2013	Kisoro	Mutolere (St. Francis) HOSPITAL	1	
47	25/11/2013	Amuria	Amuria HC IV	1	
47	25/11/2013	Zombo	Nyapea HOSPITAL	1	
47	25/11/2013	Kamuli	Kamuli Mission Hospital	1	

Human Influenza: The National Influenza Centre in the Uganda Virus Institute [UVRI] & Makerere University Walter Reed Project [MUWRP] maintain sentinel surveillance sites for ILI/SARI countrywide. As of 29nd November 2013; a total **of 3315 specimens** had been analyzed [by NIC till Epi-week 46 & MUWRP till Epi-week 47] with **313 isolates**. The graph below shows the isolate trends from the NIC by epidemiological week with Influenza type B, pandemic H1N1, & A (H3) being the common isolates in recent weeks.



Makerere University Walter Reed Project [MUWRP] is implements a complementary Influenza surveillance program with sites in Gulu RRH, Jinja RRH, & Mulago NRH. By the end of **the 47th epidemiological week of 2013** a total of **1170 human samples** [included in the NIC total above] had been analyzed by MUWRP with **101 isolates.** The isolate trends are shown in the figure below.

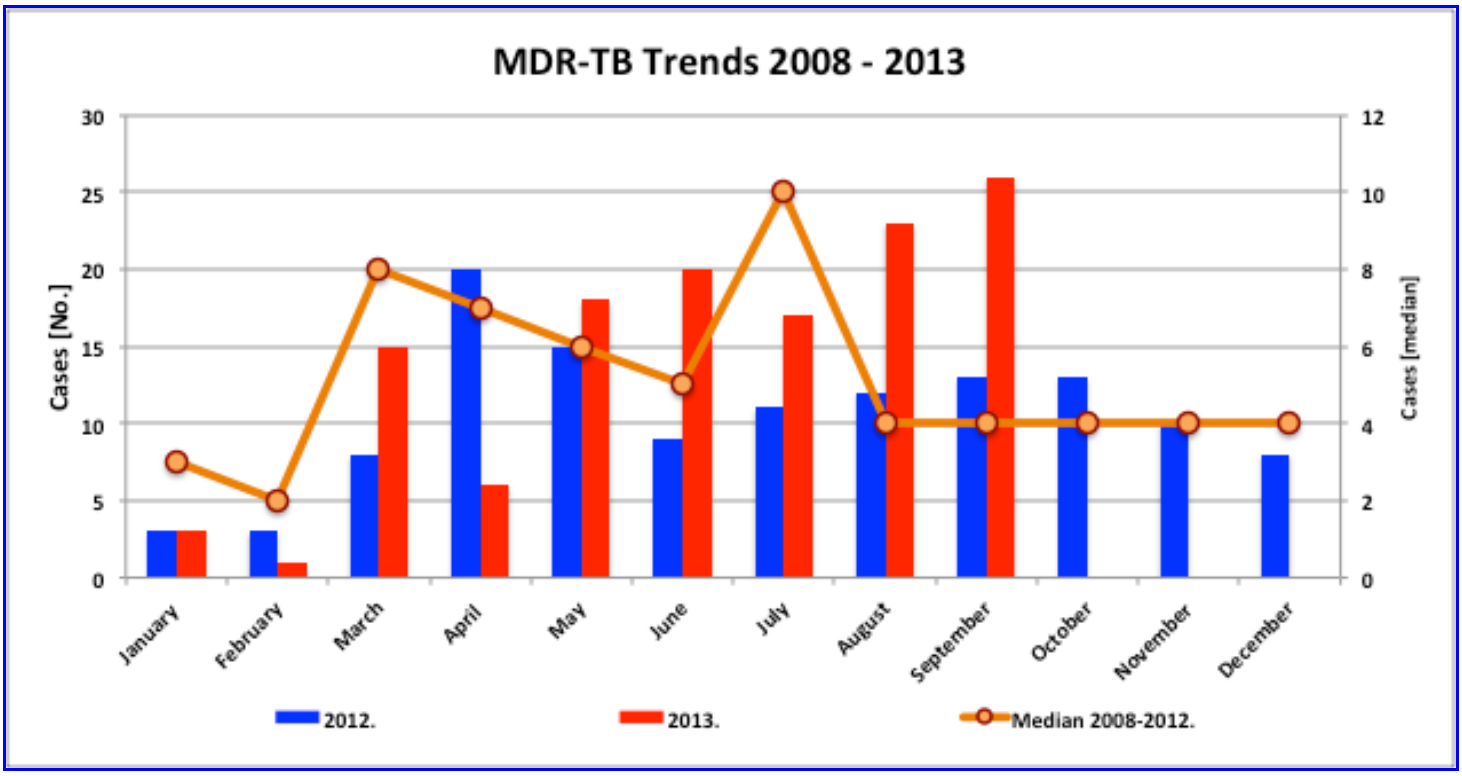


Multi-Drug Resistant Tuberculosis [MDR-TB]: A total of 491 MDR-TB cases have been detected between January 2008 and September 2013. During this period, MDR-TB case detection has increased from 30 cases in 2008 to 86 cases in 2010; 125 cases in 2012; & 129 cases by September 30, 2013. MDR-TB case detection is higher in districts close to the designated regional MDR-TB treatment centres in Kampala, Wakiso, Arua, Gulu, Kitgum, and Mpigi.

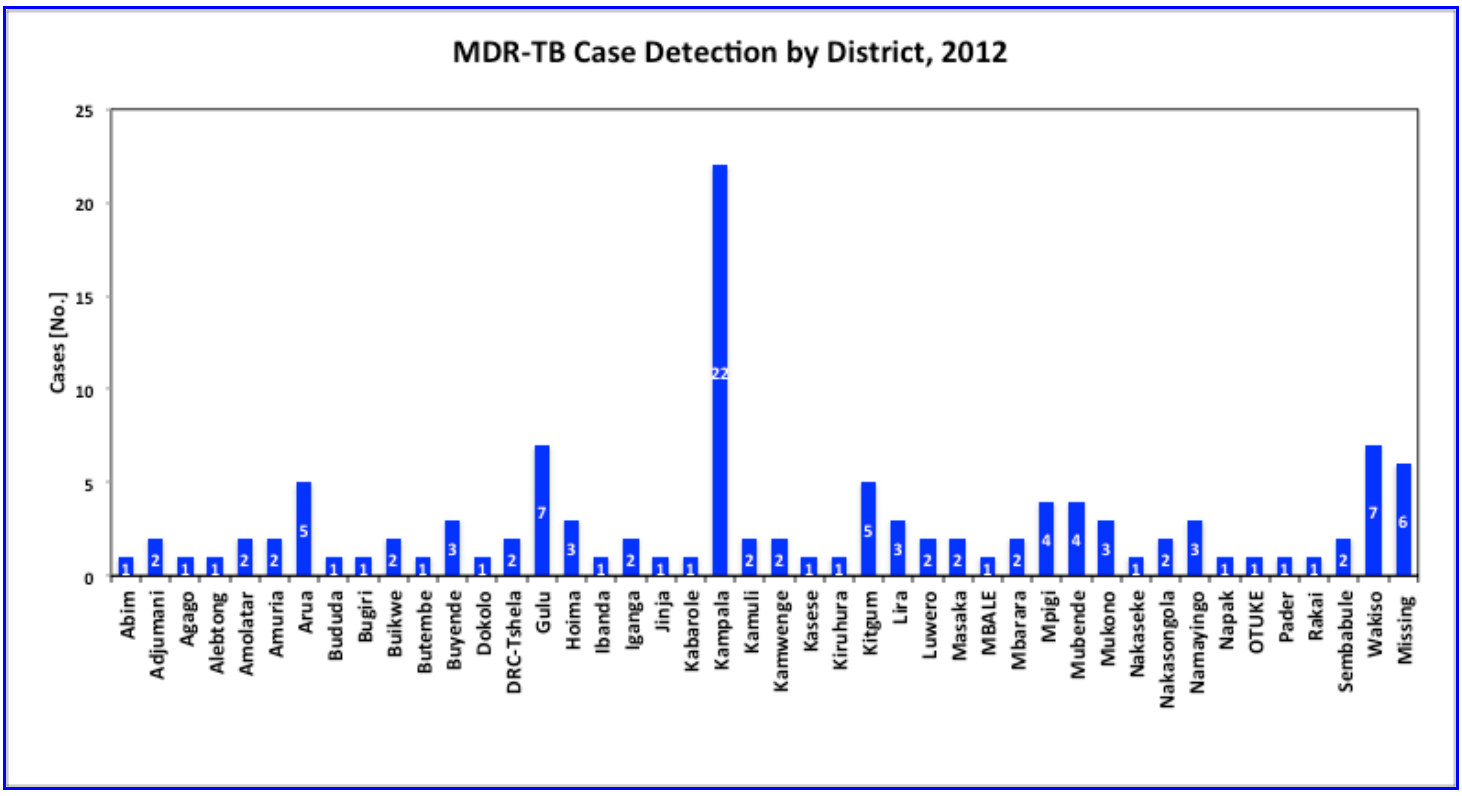
During 2013, the new MDR-TB cases for the months of June, August, & September exceeded the median number of cases for the corresponding months during 2008-2012. Similarly, the new MDR-TB cases during June, August, & September of 2013 exceeded the number of new cases for the corresponding months of 2012 (see figure below with MDR-TB trends for 2008-2013).

The National TB & Leprosy Program (NTLP) is currently using the **hospitalization & ambulatory (mixed) model** for management of MDR-TB cases. This model entails initiation of MDR-TB patients on treatment at accredited facilities; with the subsequent daily follow-up being undertaken at the health facility nearest to the patient's home. The initiation facilities also orient staff at follow up facilities; supply infection control materials; and provide periodic mentorships. The Initiation facility and the follow up facility staff should visit the home of the patient as a requirement to educate the family of their role in supporting this patient during treatment; and also do contact examination.

There are nine (9) MDR-TB initiation facilities [Mulago NRH, Mbarara RRH, Mbale RRH, Arua RRH, Masaka RRH, Fort portal RRH, Gulu RRH, Kitgum Hospital, and Iganga Hospital] and due to the lack of specialized isolation wards at RRH, all close-to-home facilities are used as follow up facilities for convenient management of MDR-TB patients.



The following RRH are being assessed and prepared for MDR-TB management: Lira RRH, Kabale RRH, Soroti RRH, Hoima RRH, Mubende RRH, Moroto RRH, and Mildmay Centre.



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These data show that the prevention and control of TB and MDR-TB is fast becoming a national emergency that requires multi-sectoral response with adequate resources to: enhance treatment support for drug susceptible TB cases; secure food for MDR-TB cases; enhance utilization of the 46 gene xpert machines by screening more HIV cases for TB & screening suspect MDR-TB cases; monthly sputum testing at the NTRL for all MDR-TB cases; and register, initiate treatment, and educate new TB cases on TB treatment compliance.

Editorial: *Dr. Joseph F. Wamala, Dr. Robert Musoke, Mr. M. Mugagga, Dr. Charles Okot, Dr. Edson Katushabe, Dr. Immaculate Nabukenya, Mr. Luswa Lukwago, Dr. James Sekajugo, Dr. Francis Adatu, Dr. Issa Makumbi*

Founders:*Dr. Jimmy Kamugisha (RIP), Dr. J. Wanyana, Dr. M. Lamunu, Dr. C. Mugero Dr. N. Ndayimirigye Mr. L. Luswa Dr. N. Bakyaita, Mr. M. Mugagga*

For comments please contact:
The Epidemiological Surveillance Division- M.O.H
P.O BOX 7272 Kampala, Tel: 0414-340874/0414-345108

Email: esduganda@yahoo.co.uk

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Annex 1: Summary of District Reports for Epidemiological week 47 of 2013 [18 – 24 Nov 2013] (Numbers in brackets indicate deaths)

District	% of H/U reporting	Timely	AFP	Animal bite (Suspected Rabies)	Cholera	Dysentery	Guinea Worm	Malaria	Measles	Meningitis	NNT	Plague	Typhoid Fever	Sleeping Sickness	New Others
Amudat	100	T	0	1	0	8	0	599	0	0	0	0	0	0	KZ 2, ,
Bulambuli	100	T	0	0	0	0	0	1242	0	0	0	0	0	0	
Busia	100	T	0	3	0	5	0	5751	0	0	0	0	0	0	
Koboko	100	T	0	0	0	9	0	2415	0	0	0	0	0	0	
Mbale	100	T	0	20	0	25	0	3693(3)	1	0	0	0	75	0	CP 11, ,
Moyo	100	T	0	1	0	37	0	4755	0	0	0	0	17	0	
Otuke	100	T	0	0	0	4	0	1116	0	0	0	0	0	0	
Sheema	100	T	0	0	0	0	0	3345	0	0	0	0	3	0	
Kayunga	96	T	0	6	0	9	0	3331(1)	0	0	0	0	4	0	
Manafwa	96	T	0	1	0	4	0	3966	0	0	0	0	16	0	
Kisoro	95	T	0	1	0	7	0	483	0	0	0	0	8	0	
Dokolo	94	T	0	3	0	3	0	2193	0	0	0	0	2	0	
Yumbe	83	T	0	1	0	26	0	2619(2)	3	0	0	0	21	0	
Bundibugyo	82	T	0	0	0	28	0	2406(1)	0	0	1	0	13	0	
Kiruhura	82	T	0	5	0	1	0	5025	0	0	0	0	5	0	
Butambala	78	T	0	0	0	3	0	1068	0	0	0	0	12	0	
Adjumani	77	T	0	4	0	36	0	4069(1)	0	0	0	0	0	0	
Kiryandongo	76	T	0	4	0	1	0	1525	0	0	0	0	13	0	
Buko-mansimbi	75	T	0	0	0	1	0	887	0	0	0	0	1	0	
Ibanda	72	T	0	9	0	1	0	2562(1)	0	0	0	0	2	0	
Kyankwanzi	71	T	0	2(1)	0	3	0	1458	0	0	0	0	19	0	
Nwoya	69	T	0	0	0	2	0	417	0	0	0	0	0	0	
Zombo	68	T	0	0	0	10	0	567	0	0	0	0	9	0	
Masindi	67	T	0	1	0	7	0	1959	0	0	0	0	4	0	

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District	% of H/U reporting	Timely	AFP	Animal bite (Suspected Rabies)	Cholera	Dysentery	Guinea Worm	Malaria	Measles	Meningitis	NNT	Plague	Typhoid Fever	Sleeping Sickness	New Others
Ntoroko	67	T	0	1	0	18	0	351	0	0	0	0	0	0	
Kaabong	63	T	0	4	0	36	0	2304(1)	0	0	0	0	0	0	
Nakaseke	61	T	0	4	0	13	0	1514(1)	2	1	1	0	23	0	
Kyegegwa	60	T	0	1	0	3	0	1386(1)	0	0	0	0	7	0	
Mbarara	60	T	0	5	0	6	0	3928	0	0	0	0	55	0	
Kotido	59	T	0	2	0	37	0	1797(1)	0	0	0	0	31	0	
Nebbi	59	T	0	3	2	31	0	2680(5)	2	0	0	0	24	0	
Buikwe	58	T	0	9	0	7	0	1752	2	0	0	0	43	0	
Kamwenge	58	T	0	9	0	3	0	2540	1	0	0	0	1	0	
Maracha	58	T	0	4	0	5	0	770	0	0	0	0	22	0	
Kabale	57	T	0	2	0	1	0	417	0	0	0	0	9	0	
Kaliro	55	T	0	0	0	0	0	1429	0	0	0	0	4	0	
Serere	55	T	0	1	0	8	0	1552	0	0	0	0	1	0	
Sironko	55	T	0	1	0	6	0	1598(1)	0	0	0	0	0	0	
Kiboga	54	T	0	4	0	1	0	961	1	0	0	0	31	0	
Ssembabule	54	T	0	5	0	8	0	2127	0	0	0	0	24	0	
Gulu	53	T	0	7	0	28	0	1994	0	0	0	0	33	0	
Isingiro	52	T	0	0	0	4	0	3198	0	0	0	0	15	0	
Lira	52	T	0	16	0	11	0	2408(3)	1	0	0	0	24	0	
Masaka	52	T	0	1	0	16	0	1094	0	0	0	0	6	0	
Nakasongola	52	T	0	1	0	10	0	2082	5	0	0	0	18	0	
Mukono	51	T	0	2	0	5	0	2012	0	0	0	0	9	0	
Amolatar	50	T	0	2	0	15	0	1033	0	0	0	0	2	0	
Buliisa	50	T	0	2	0	2	0	514	0	0	0	0	1	0	
Kole	50	T	0	0	0	0	0	575	0	0	0	0	4	0	
Wakiso	47	T	0	46	0	29	0	5115(1)	3	0	0	0	59	0	

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District	% of H/U reporting	Timely	AFP	Animal bite (Suspected Rabies)	Cholera	Dysentery	Guinea Worm	Malaria	Measles	Meningitis	NNT	Plague	Typhoid Fever	Sleeping Sickness	New Others
Buvuma	45	T	0	0	0	1	0	351	0	1	0	0	0	0	
Gomba	44	T	0	0	0	1	0	863	0	0	0	0	0	0	
Kamuli	44	T	0	1	0	2	0	3604	0	0	0	0	0	0	
Mpigi	44	T	0	0	0	0	0	1386	0	0	0	0	0	0	
Rukungiri	44	T	0	0	0	0	0	1635	0	0	0	0	0	0	
Tororo	44	T	0	17	0	7	0	4595	1	0	0	0	7	0	
National	**44**		**1(0)**	**314(1)**	**2(0)**	**781(1)**	**0(0)**	**163932(36)**	**26(0)**	**2(0)**	**2(0)**	**0(0)**	**1106(0)**	**0(0)**	
Butaleja	42	T	0	1	0	0	0	1964(1)	0	0	0	0	0	0	
Kyenjojo	42	T	0	1	0	9	0	1064	0	0	0	0	0	0	
Jinja	41	T	0	4	0	2	0	2245	0	0	0	0	2	0	
Kabarole	41	T	0	3	0	8	0	1872(2)	0	0	0	0	16	0	
Kapchorwa	41	T	0	8	0	26	0	584	0	0	0	0	0	0	
Bududa	40	T	0	0	0	2	0	533	0	0	0	0	4	0	
Bukwo	40	T	0	3	0	10	0	192	0	0	0	0	62	0	
Kumi	40	T	0	13	0	8	0	1590	0	0	0	0	44	0	
Ntungamo	40	T	0	12	0	2	0	1021	0	0	0	0	1	0	
Mityana	38	T	0	2	0	7	0	1173(1)	1	0	0	0	54	0	
Pallisa	37	T	0	0	0	6	0	2275(1)	0	0	0	0	6	0	
Kalangala	36	T	0	0	0	10	0	111	0	0	0	0	0	0	
Kanungu	35	T	0	0	0	1	0	884	0	0	0	0	7	0	
Kibaale	35	T	0	5	0	11	0	2087	0	0	0	0	48	0	
Hoima	33	T	0	0	0	14	0	1852(2)	0	0	0	0	12	0	
Mubende	33	T	0	16	0	13	0	2833	1	0	0	0	18	0	
Abim	32	T	0	4	0	10	0	887	0	0	0	0	0	0	
Luuka	32	T	0	0	0	0	0	870	0	0	0	0	0	0	
Oyam	32	T	0	0	0	3	0	562	0	0	0	0	4	0	

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District	% of H/U reporting	Timely	AFP	Animal bite (Suspected Rabies)	Cholera	Dysentery	Guinea Worm	Malaria	Measles	Meningitis	NNT	Plague	Typhoid Fever	Sleeping Sickness	New Others
Kibuku	31	T	0	0	0	2	0	615	0	0	0	0	0	0	
Rakai	31	T	0	1	0	21	0	2033	0	0	0	0	23	0	
Bushenyi	30	T	0	4	0	2	0	1181	0	0	0	0	3	0	
Buyende	30	T	0	1	0	0	0	533	0	0	0	0	0	0	
Kalungu	30	T	0	0	0	0	0	283	0	0	0	0	10	0	
Kaberamaido	29	T	0	0	0	4	0	1101	0	0	0	0	0	0	
Luweero	29	T	0	2	0	8	0	1389	0	0	0	0	19	0	
Nakapiripirit	29	T	0	0	0	6	0	367(1)	0	0	0	0	0	0	
Buhweju	27	T	0	0	0	0	0	309	0	0	0	0	0	0	
Bukedea	27	T	0	0	0	3	0	325	0	0	0	0	4	0	
Kasese	27	T	0	0	0	9(1)	0	1516	0	0	0	0	4	0	
Amuria	26	T	0	0	0	0	0	1106	0	0	0	0	2	0	
Mayuge	26	T	0	1	0	7	0	1552	0	0	0	0	0	0	
Soroti	26	T	0	2	0	6	0	1713(1)	0	0	0	0	10	0	
Lamwo	25	T	0	1	0	0	0	215	0	0	0	0	2	0	
Alebtong	21	T	0	0	0	1	0	350	0	0	0	0	0	0	
Namutumba	21	T	0	0	0	1	0	712	0	0	0	0	0	0	
Arua	20	T	0	5	0	8	0	1818	0	0	0	0	18	0	
Mitooma	20	T	0	0	0	0	0	784	0	0	0	0	0	0	
Amuru	19	T	0	1	0	1	0	112	0	0	0	0	0	0	
Kitgum	19	T	0	0	0	3	0	187(1)	0	0	0	0	9	0	
Kween	18	T	1	2	0	0	0	133	0	0	0	0	9	0	
Lwengo	17	T	0	0	0	1	0	82	1	0	0	0	9	0	
Ngora	17	T	0	0	0	0	0	263	0	0	0	0	0	0	
Iganga	15	T	0	0	0	0	0	1049(2)	0	0	0	0	0	0	
Lyantonde	15	T	0	0	0	0	0	490	0	0	0	0	11	0	

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District	% of H/U reporting	Timely	AFP	Animal bite (Suspected Rabies)	Cholera	Dysentery	Guinea Worm	Malaria	Measles	Meningitis	NNT	Plague	Typhoid Fever	Sleeping Sickness	New Others
Moroto	14	T	0	8	0	6	0	704(1)	0	0	0	0	4	0	
Pader	12	T	0	0	0	5	0	272	0	0	0	0	2	0	
Namayingo	10	T	0	0	0	0	0	326	0	0	0	0	1	0	
Apac	9	T	0	2	0	0	0	94	0	0	0	0	0	0	
Napak	8	T	0	0	0	1	0	164	0	0	0	0	3	0	
Bugiri	7	T	0	0	0	0	0	57	0	0	0	0	0	0	
Budaka	6	T	0	0	0	0	0	191	0	0	0	0	0	0	
Rubirizi	6	T	0	0	0	0	0	36	0	0	0	0	1	0	
Katakwi	5	T	0	0	0	0	0	65	0	0	0	0	0	0	
Kampala	2	T	0	0	0	0	0	190	1	0	0	0	7	0	
Agago	**NR**	**NR**	**NR**	**NR**	**NR**	**NR**	**NR**	**NR**	**NR**	**NR**	**NR**	**NR**	**NR**	**NR**	**NR**

HU= Health Units, NR = Not reported, CP = Chicken Pox, KZ = Kalazar, Sch = Schistosomiasis, MP= Malaria in pregnancy; Nodding Syndrome

Color codes for Completeness of reporting: Dark Yellow; (80-100%); & Light Brown (0-79%); Red (No Report)

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Annex 2: Summary of Epidemics and Response Activities initiated by Epidemiological week 47 of 2013 [18 - 24 November 2013]

Condition	Affected districts	New cases (deaths) 18th – 24th Nov 2013 [47th Epi-week]	Cumulative Cases	Cumulative Deaths	Comments and Actions
Plague (probable)	Arua	0	1	0	1. On 16-11-2013; Opia HC in Arua reported a 12-year-old male from Ngadi village, Logiri sub-county, Arua district with high fever, general weakness, and left axillary swelling staring 14-11-2013. 2. Rodent die-offs were reported in the village during the week of onset. 3. Plague RDT & DFA were positive (Plague culture underway); Malaria RDT – positive. 4. Ecological and epidemiological investigations are underway to inform the response.
Acute Jaundice Syndrome [AJS]	Lamwo	0	14	0	1. On 15-11-2013, a cluster of 14 cases presenting with fever, headache, joint pains, and jaundice was reported from Apyeta village, Apyeta parish, Palabek Ogili sub-county, Lamwo district. 2. Samples tested at UVRI were PCR negative for Yellow Fever [YF], West Nile Virus [WNV], Chikungunya, Dengue 1-4; Onyong nyong; Ebola (all strains); Marburg; Rift Valley Fever; & CCHF. 3. However, two of the samples tested positive for Zika & YF IgM. 4. Confirmatory testing (PRNT for YF & Zika] for the two samples is underway & IgM testing for WNV & Dengue are ongoing.
Acute Jaundice Syndrome [AJS]	Napak & Moroto	0	60	1	1. On 14-11-13; the Medical Superintendent St. Kizito Hospital Matany in Napak district reported a maternal death involving a 29-year-old G2Para1+0 at 28/40 gestation. 2. She was referred from Iriiri HCIII and presented in coma, fitted once on admission and had a three-week history of yellowing of the eyes. Malaria RDT & HBsAg were negative; RBS was 4.7 mmol/l. 3. A provisional diagnosis of Hepatic encephalopathy 2^0 to HEV infection was made. She was started on supportive treatment but died 23 hours after admission. 4. At least 60 cases of AJS have been reported from Napak district since 20th February 2013 with inconclusive laboratory test findings. 5. Three samples from the acute jaundice syndrome cases in Napak tested positive for Hepatitis E Virus [HEV] by PCR. 6. A response plan has been finalized by the district to support local investigations and response.
Acute Jaundice Syndrome [AJS]	Kotido	0	7	1	1. The DHO Kotido has reported a cluster of seven (7) cases and one (1) death with AJS. 2. The cases included six (6) students from Kotido Progressive Academy Secondary School and their head teacher. The initial case was a 17-year-old male who presented to Church of Uganda [COU] HCIII in Kotido TC with one-week history of fever, severe headache, general body weakness, and loss of unconsciousness. 3. He had medical notes from a private clinic where he had been treated using coartem after he tested positive for malaria and typhoid fever [by Widal]. 4. Following admission to COU HCIII, he was started on intravenous quinine but the following day the patient became aggressive, developed epistaxis, and by this time had deep jaundice. No convulsions,

Condition	Affected districts	New cases (deaths) 18th – 24th Nov 2013 [47th Epi-week]	Cumulative Cases	Cumulative Deaths	Comments and Actions
					vomiting, diarrhea, cough, dysuria, or hematuria were reported. 5. Despite giving first aid, the nose bleeding continued until the patient passed away on 25th October 2013. 6. Unfortunately, blood samples were not obtained prior to burial though six blood samples were later on collected from close contacts to the deceased case. 7. All the six (6) samples were positive for HBsAg [but cases were asymptomatic]; the aliquots of the samples could not be tested at UVRI since they had hemolyzed. 8. Additional samples are being obtained for testing at UVRI.
Plague (ruled out)	Zombo	0	1	0	1. A suspect plague case was reported from Zombo district on 14 October 2013. The case is an 8 year old female from Oyaragada Village, Papoga Parish who presented with fever (38.1°C), headache, general malaise, and one day history of painful right inguinal swelling (bubo). 2. Malaria & plague RDT + culturing were negative. The case was discharged after improving on treatment. 3. No additional cases were identified among his close contacts and active surveillance is ongoing in the area.
Plague Alert	Arua	0	0	0	1. Following the confirmation of plague in a rodent carcass obtained from Wali village, Opia parish, Vurra sub-county, Arua district, Indoor residual spaying was undertaken by the DHT Arua with support from the CDC/UVRI Rat fall surveillance project. 2. Three additional rodent carcass (all *Rattus rattus* species) were obtained from Offa B village, Ayavu parish, Vurra sub county in Arua district have also tested positive for plague on both (DFA) testing and culturing. IRD was completed on 18th October in the affected village. 3. Enhanced surveillance and community education are ongoing.
Guinea worm (ruled out)	Kitgum	0	0	0	1. A suspect Guinea worm case was reported from Labot-lwonga village, Pajong parish in Mucwini Sub County, Kitgum district. 2. An assessment by the Kitgum district Guinea worm focal person revealed she had suffered from the disease 15 years ago through her current presentation is not consistent with guinea worm and neither could additional cases be identified in her neighbourhood. 3. She has however been placed under observation.
Polio Alert	Horn of Africa [Somalia, Kenya,	0	3	0	1. Due to the ongoing Polio outbreak in the Horn of Africa countries including Somalia, Ethiopia, Kenya, & South Sudan; 2. Uganda has implemented two rounds of SIAs with the most recent conducted during October 19-21,

Condition	Affected districts	New cases (deaths) 18th – 24th Nov 2013 [47th Epi-week]	Cumulative Cases	Cumulative Deaths	Comments and Actions
	Ethiopia & South Sudan]				2013 in 47 districts. 3. Surveillance has been enhanced and additional rounds of SIAs are planned.
Cholera	Maracha	0	2	0	1. Two cases of cholera were reported from Yiba & Ocevu villages in Oleba sub-county among fishmongers who traveled to Panyimur prior to the onset of their illness, starting 11 Sept 2013 and 14 Sep 2013 respectively. 2. The two cases are still admitted in Maracha hospital and have stabilized on treatment. 3. Rapid testing for cholera (performed with support from MSF) was positive for cholera. 4. The affected villages have been educated on cholera presentation and prevention and active case search is ongoing.
Crimean-Congo Hemorrhagic Fever (CCHF)	Agago/Wakiso	0	6	2	1. This outbreak is now under control and all the designated isolation wards in Agago and Mulago have been closed. 2. A total of six (6) CCHF cases [five (5) confirmed & one (1) probable] have been reported from Agago [4 cases] and Wakiso [2 cases] districts. The outbreak in Agago started on 4th August 2013 with all the cases originating from Omot sub-county and were linked to slaughter of a potentially viraemic animal. 3. The Wakiso cluster is linked to a Ugandan business man who became ill after travelling from Juba to Gulu on a truck that had transported cattle from Karamoja to Juba. 4. The two clusters are therefore linked to exposures to potential reservoirs in Karamoja and the surrounding districts where CCHF is known to be endemic in livestock. 5. All the 52 contacts listed completed their two-week follow up with none developing disease symptoms. 6. Outbreak response is being coordinated by the task force committees at national and district level.
Cholera (confirmed)	Buliisa	0(0)	100	04	1. The outbreak is on the decline but sporadic cases continue to be reported from the landing sites. During the current upsurge, initial cases originated from Kigwera South East Village, Kigwera Parish, Kigwera Sub-county, Buliisa district starting 16 July 2013. One sample tested positive for *Vibrio cholerae* sensitive to Ciprofloxacin and Tetracyclines. 2. Prior to the current upsurge, cases were reported from Wanseko in Kigwera sub-county starting 14-05-2013. These cases had travelled from Kigorobya sub-county in Hoima district – where an outbreak was already ongoing. These cases were all managed in Buliisa HCIV. All samples tested negative for *Vibrio Cholerae* at CPHL since most patients take antibiotics

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Condition	Affected districts	New cases (deaths) 18th – 24th Nov 2013 [47th Epi-week]	Cumulative Cases	Cumulative Deaths	Comments and Actions
					before reporting to the CTC for treatment.
Cholera (suspect)	Hoima	0(0)	131	5 (CFR 3.82%)	1. The outbreak is on the decline but sporadic cases continue to be reported from the landing sites. 2. The current upsurge started on 28 July 2013 with cases originating from Kijangi Village, Toonya Parish, Buseruka Sub-county, Hoima district. All cholera cases are being managed at CTC at Kijangi Landing site and stocks of medicines and supplies are reported to be adequate. 3. Prior to the current upsurge, cases were reported from Runga village/landing site, Kapaapi Parish, Kigorobya sub-county starting 12_04_2013. 4. World Vision Uganda supported the establishment of a CTC at Runga landing site. Other partners like URCS are supported active case finding with health education at the landing site; and provision of Jerry cans for safe water storage.
Cholera (suspect)	Nebbi	2(0)	205	9 (CFR 4.39%)	1. The outbreak is on the decline but sporadic cases continue to be reported from the landing sites. 2. The initial cases were reported from Angum village, Nyakagei Parish, Panyimur sub-county on the shores of Lake Albert starting 16th January 2013. 3. Epidemiological analysis of the outbreak reveals that females constituted 54% of the cases; 71.8% of the cases were aged 0-29 years; & the epidemic curve shows successive peaks typical of a propagated outbreak with most cases originating from the fishing villages on Lake Albert in Panyimur sub-county. 4. Intense behavioural change campaign (sensitisations and inspection of public places and domestic areas to enforce sanitation and hygiene standards) was launched by the district taskforce. 5. Sporadic cases were also been reported from Parombo, Erussi, and Nyaravur sub-counties.
Nodding Syndrome	Kitgum		OPD – 2,034 IPD – 162	5	1. Case management ongoing at the treatment centre and outreach posts. 2. Nodding syndrome census finalized in Feb. 2013 and the data analysis is underway. 3. The data presented here is derived from cases seen at NS treatment centre – Kitgum hosp. & outreaches.
	Lamwo		OPD - 349 IPD – 39		1. Case management ongoing at the treatment centre and outreach posts. 2. Nodding syndrome census finalized in Feb. 2013 and the data analysis is underway. 3. The data presented here is derived from patients seen at NS treatment centres – Padibe HCIV

Condition	Affected districts	New cases (deaths) 18th – 24th Nov 2013 [47th Epi-week]	Cumulative Cases	Cumulative Deaths	Comments and Actions
					& the 12 outreaches conducted monthly to Palabek Kal; Palabek Gem; Palabek Ogili & Lokung sub-counties. 4. Aerial spraying along rivers Pager & Aswa finalised in November/December 2012. 5. Food received from OPM was distributed to the affected families on [3/02/13].
	Pader		OPD – 1,210 IPD – 108	15	1. Case management ongoing at the treatment centre and outreach posts. 2. Nodding syndrome census finalized in Feb. 2013 and the data analysis is underway. 3. The data presented here is derived from patients seen at NS treatment centres – Atanga HCIII & outreaches.
	Gulu		330	1	1. Case management ongoing at the treatment centre and outreach posts. 2. One death was reported from Aromowanglobo; after he missed a scheduled refill visit and fitted while alone at home. 3. A total of 15 HCW trained in NS case management; & they subsequently conducted verification in Omel & Cwero Parishes in Paicho sub-county; & Paibona parish in Awac sub-county. 4. NS treatment centres set up in Odek HCIII; Aromowanglobo HCII; Cwero HCII; & Labworomo HCIII. 5. Food donations from WVU have been distributed to affected families. & Additional funds have been provided by WVU to train more HCW on NS case management.
	Lira		13		1. A total of 13 NS cases registered but only three are attending care at Aromo HC while the rest are attending care in Aromowanglobo in Gulu. No admissions to date.
	Amuru		61		1. No new cases recorded; cases are getting care from the treatment centre in Atiak HCIV and at the four (4) outreach sites [Ogomraa Community School; Okidi HCII; Pacilo HCII; & Gunya Community School]. 2. A total of 10 HCW trained in NS case management. 3. Mass treatment for onchocerciasis with ivermectin conducted in October 2012.
Epilepsy	Kitgum		OPD – 1,321 IPD – 25		Data derived from cases seen at NS treatment centre – Kitgum hosp. & outreaches.
	Lamwo		OPD – 122 IPD – 0		The data presented here is derived from patients seen at the NS treatment centres – Padibe HCIV & the 12 outreaches conducted monthly to Palabek Kal; Palabek Gem; Palabek Ogili & Lokung sub-counties.

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Condition	Affected districts	New cases (deaths) 18th – 24th Nov 2013 [47th Epi-week]	Cumulative Cases	Cumulative Deaths	Comments and Actions
	Pader		OPD – 1,251 IPD – 41		The data presented here is derived from patients seen at NS treatment centres – Atanga HCIII & outreaches.
	Gulu		268		Data derived from Nodding Syndrome treatment centres.
	Lira		344		Current data derived from cases seeking care from the treatment centre in Aromo HC
	Amuru		62		Data derived from Nodding Syndrome treatment centres.

Editorial: Editorial: *Dr. Joseph F. Wamala, Dr. Robert Musoke, Mr. M. Mugagga, Dr. Charles Okot, Dr. Edson Katushabe, Dr. Immaculate Nabukenya, Mr. Luswa Lukwago, Dr. James Sekajugo, Dr. Francis Adatu, Dr. Issa Makumbi*

Founders: *Dr. Jimmy Kamugisha (RIP), Dr. J. Wanyana, Dr. M. Lamunu, Dr. C. Mugero Dr. N. Ndayimirigye Mr. L. Luswa Dr. N. Bakyaita, Mr. M. Mugagga*

For comments please contact:

The Epidemiological Surveillance Division- M.O.H
P.O BOX 7272 Kampala, Tel: 0414-340874/0414-345108
Email: esduganda@yahoo.co.uk

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The_Ministry_of_Health_Emergency_Operations_Centre_(EOC)_Brochure

DRAFT
Public Health EOC BROCHURE

Introduction

Preparing for and protecting against public health threats is a key aspect of GOU's mission. In order to attain a resilient nation to disasters depends on how well the Government is prepared, organized and coordinated.

The emergency could be acute or evolving in form of disease outbreak, natural disaster or terror attacks.

While the primary purpose of the PHEOC is to respond to public health emergencies, the facility and staff will support other interested programmes and users to benefit the One Health Approach of the Ministry.

Problem

Due to the increasing frequency and complexity of disease outbreaks and disasters and the emerging greater risk for terrorism, Ministry of Health (MOH) has established an Emergency Operations Center (EOC) to respond to these Public Health Events in a more coherent, effective and efficient manner to protect the lives of Ugandans (i.e. minimize the impact of the crisis on citizens)

Mission

PHEOC Serve as MoH's central focal point for organizing, coordinating, supporting and managing all aspects of evidence-based public health emergency response efforts.

During major emergencies, the Ministry of Health (MOH) implements the Incident Management Systems (IMS) that brings all the required response elements and relevant staff to meet the needs of the emergency.

PHEOC is a MOH central public health incident management centre for coordinating and supporting NTF during the emergency response.

Functions of PHEOC

PHEOC provides physical space to house together subject matter experts (SMEs) to respond effectively, efficiently and collaboratively to the emergency

PHEOC is equipped with and provides a state of the art information technology that support subject matter experts (SMEs) engaged in response operations for gathering, analyzing, and validating information on the emergency

PHEOC is a communication hub for disseminating and communicating vital information to the emergency responders and decision makers

PHEOC is nerve centre responsible for collecting, receiving and analyzing information on potential public health emergencies for decision makers.

Identify and coordinate the deployment of resources for emergency response especially in a comprehensive multi-agency response.
Provides progress on the public health emergency situation through provision of a daily situation report during the occurrence of a PHE

It will be the hub of alert and response operations bringing collaboration of the Ministry of Health, other relevant sectors, Districts and Partners in responding to real or potential Public Health Event (PHE).

Respond to REQUEST FOR INFORMATION in case of health threats (via e-mail or hot line)

Provide facilities for press conference, video/teleconferencing, training and meeting space

Uganda - Emergency Operations Center