



Ministry of Health Uganda

Weekly Epidemiological Bulletin

Epidemiological Week 46

14th – 20th November 2016

Highlights of the Week

- ☞ Cholera continues in Bulambuli district.
- ☞ Large outbreak reported in Niger, West Africa

Table 1: Summary table of the priority disease and events in Week 46, 2016

Indicator	Week 46 2015	Week 45 2016	Week 46 2016
% of Districts reporting (n=112)	100	100	100
% of Health facilities reporting	62.9	75.5	78.1
Priority diseases	Cases (deaths)	Cases (deaths)	Cases (deaths)
AFP	0(0)	10(0)	19(0)
Animal bites	189(0)	350(0)	363(0)
Cholera	29(0)	15(0)	32(0)
Dysentery	881(1)	843(2)	807(1)
Guinea Worm	0(0)	1(0)	0(0)
Malaria	139699(21)	199178(92)	200957(36)
Measles	134(1)	45(0)	32(0)
Bacterial Meningitis	2(1)	6(0)	5(1)
NNT	2(3)	2(0)	1(0)
Plague	5(0)	0(0)	0(0)
Typhoid	1344(14)	1763(1)	1707(1)
MDR TB	6(1)	14(1)	24(3)
Human Influenza samples (lab confirmed/Samples tested)	-	1/28	1/27

Completeness of Reporting

During Week 46 of 2016, the proportion of health facilities that reported this week was 78.1% indicating a 24.2% increase in reporting rate in comparison to the same week in 2015. Only 10.3% (12/116) districts had 100% of their health facilities reporting and 51.7% (60/116) of the districts achieved the national target of 80%. A total of five districts had $\leq 40\%$ of its health facilities reporting this week. The district level performances in Week 46 have been presented in the figures below;

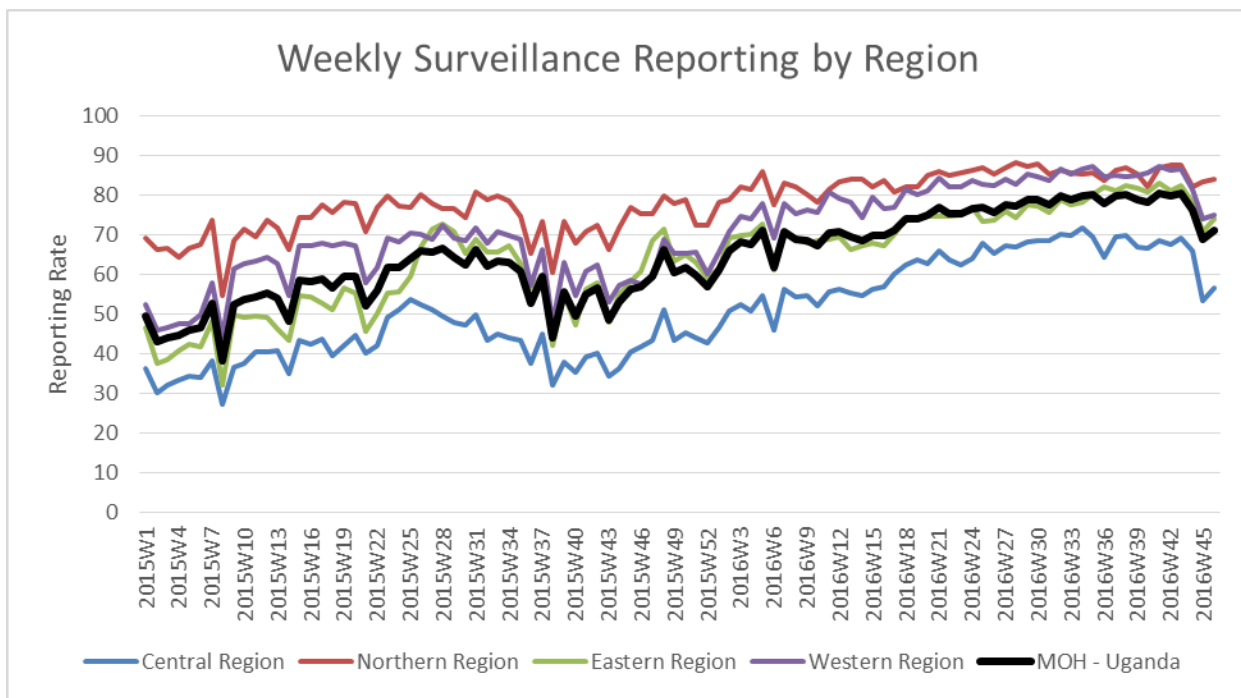


Figure 1: Figure showing weekly surveillance reporting rates by region in Week 46, 2016

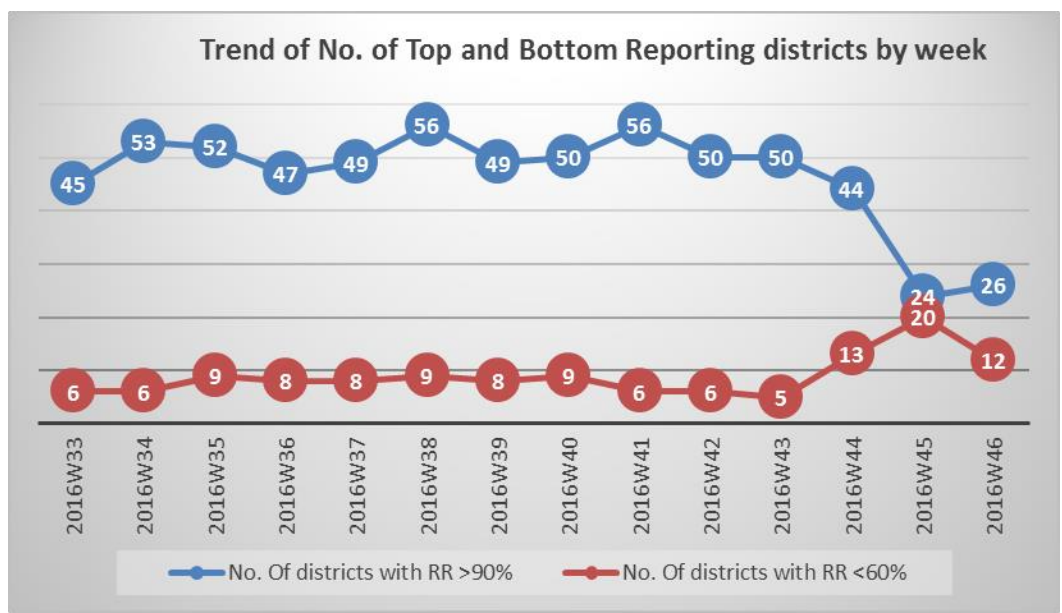


Figure 2: Figure showing trend of top and bottom reporting in Week 46, 2016

Disease outbreaks

Cholera: In Week 46 of 2016, a total of thirty two (32) suspected Cholera cases were reported from Buliisa district, with no Cholera related death.

Malaria: A total of 200,957 cases of Malaria with 36 deaths were reported in Week 46 (CFR 0.02%). The malaria cases reported this week represent a 0.9% increase in comparison to the previous week. Most malaria epidemic districts in Northern Uganda are still above the respective malaria normal channels.

Measles: In Week 46 of 2016, a total of 32 suspected cases of Measles were reported from 17 districts with no measles related death.

Nationwide, the annualized rate (Non measles febrile rash illness rate) of 4.39 suspected measles investigated per 100,000 population has been attained way above the minimum required rate of 2/100,000 population. 103/112 districts have investigated at least one suspected measles case making it 91.96% while 10 out of 112 (8.04%) districts are still silent.

As of week 45, 1426 suspected measles cases were reported since the beginning of the year. These were reported from 101 districts. The proportion of cases with measles positive IgM is 119 (8.0%) and 8 (0.7%) are epidemiologically linked. 43/100 districts reporting measles cases have had at least one positive IgM case.

Typhoid fever: In Week 46 of 2016, 1707 cases of suspected Typhoid fever were reported from 97 districts with 64.9% (61/94) of these districts being above the threshold of 5 cases. One (1) Typhoid related death was reported from Kasese district this week.

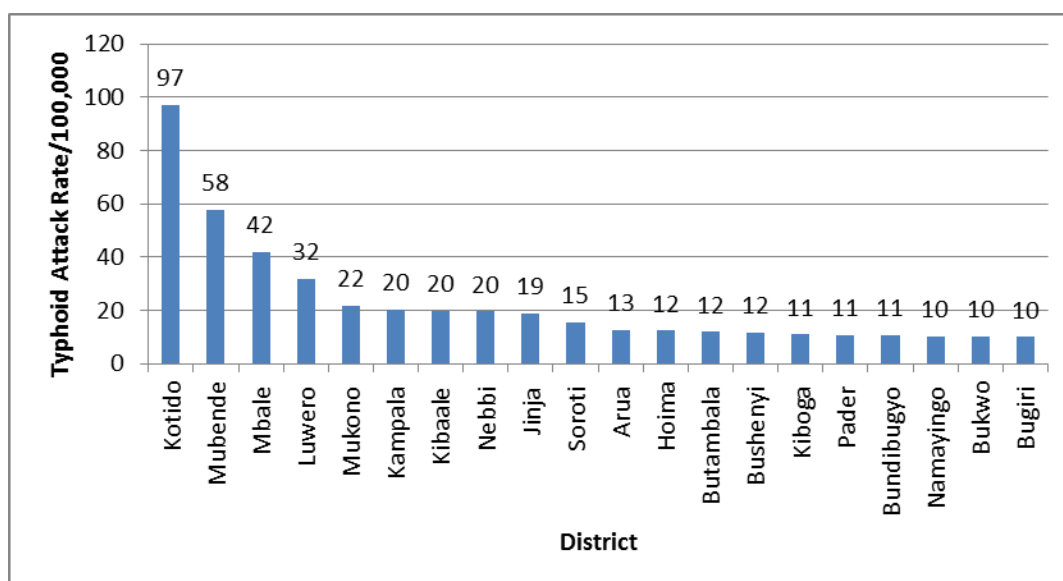


Figure 7: Graph showing Districts with Typhoid fever Attack Rate of $\geq 10/100,000$ in Week 46 of 2016

Influenza: In week 46 of 2016, 27 samples were received and processed by the Walter Reed Influenza Surveillance Project, one of which tested positive for Influenza subtype A (H3).

AFP: There was a total of 19 AFP cases were reported during this week compared to 10 cases reported during the previous week.

The Non-polio AFP rate is 3.47/100,000 children 0 – 14 years compared to Non-polio AFP rate of 2.87/100,000 children 0 – 14 years for the corresponding week of 2015. The adequate samples collection rate is 90.81% compared to 88.05% for the corresponding week of 2015. NPENT rate is 9.03% compared to 15.02% for the corresponding week of 2015.

Buhweju and **Kaabong** districts have not yet reported at least one AFP case this year (Still silent).

A discrepancy between the EPI lab and HMIS mTrac reporting

This week, two (2) cases of suspected AFP were captured by the HMIS reporting via mTrac, yet up to 19 cases were submitted for investigation at the EPI lab. This calls for districts to further strengthen and improve the weekly surveillance reporting.

Neonatal Tetanus: In Week 46 of 2016, one (1) suspected cases of NNT were reported from Mbale district with no NNT related deaths.

Maternal and Perinatal deaths: One Maternal death was reported from Nebbi district while nineteen (19) Perinatal deaths from 8 districts were reported in Week 46 of 2016 as shown in table 2 below;

Table 2: Summary table of Maternal and Perinatal deaths in Week 46, 2016

District	Facility	Maternal Deaths	Perinatal Deaths
Bushenyi	Comboni Hospital	0	2
Gulu	St. Mary's Hospital Lacor Hospital	0	1
Hoima	Bujalya HC III	0	1
Kabarole	Fort Portal Regional Referral Hospital	0	9
Kampala	Mengo Hospital	0	3
Kibaale	Kakumiro HC IV	0	1
Napak	Matany Hospital	0	1
Nebbi	Nebbi Hospital	1	1

International Public Health Events:

Rift Valley Fever in Niger: Ministry of Health in Niger notifies WHO of unexplained deaths among humans, along with deaths in livestock in the Tahoua region of Niger.

Ministry of Health in Niger notifies WHO of unexplained deaths among humans, along with deaths in livestock in the Tahoua region of Niger.

On 23 Sep [2016], human and animal specimens were tested at the Institut Pasteur de Dakar and were reported positive for Rift Valley fever (RVF) virus by PCR and for specific IgM antibodies confirming the 1st outbreak of RVF in Niger. Initially the outbreak was centered in the north west of the country in areas bordering Mali, in particular around Tassara and Tchintabaraden in the Tahoua Region, however suspected cases of RVF have recently been identified in new areas to the north and south of Tchintabaraden.

The outbreak also coincided with the annual Cure Salée gathering in Ingall (close to Agadez), Tahoua region, where nomadic stockbreeders from Niger and surrounding countries gather with their animals. It is estimated that around 2 million cattle and smaller ruminants were in the affected area during the beginning of the outbreak. Furthermore, there were reports of waves of abortions and deaths among livestock in Boni-Bangou in Niger while human RVF suspected cases and animals were confirmed with specific IgM in the neighbouring region of Menaka in Mali.

From 8 Aug to 21 Nov 2016, 266 suspected human cases including 32 deaths have been reported from Abalak, Keita, Madaoua, Tilia, Tassara, Tahoua department and Tchintabaraden in the Tahoua Region. From 8 Aug to 18 Nov 2016, 196 specimens were tested and 17 patients were confirmed positive by RVF PCR and/or serological identification of IgM antibodies. Further testing of RVF negative specimens is being performed at the Institut Pasteur de Dakar.

Given that more than 90 per cent of the samples tested negative for a recent RVF infection (IgG, PCR negative) and the increasing proportion of housewives and children affected there is a need to broaden the investigation to identify possible other underlying cause(s). In this regard an adapted investigation protocol is currently being developed which includes infectious and non-infectious diseases as well as chemicals and toxins.

Public health response: Support has been provided by WHO to the Ministry of Health (MoH) in Niger for carrying out the initial investigation for confirmation of the outbreak and notification in accordance with the provision of the International Health Regulations.

A joint field mission of the MoH and Ministry of Livestock (MoL) was conducted to the affected areas during the 1st week of October [2016] to participate in the ongoing outbreak investigations, ensure prevention and control measures are being implemented and to begin community engagement regarding RVF.

Laboratory testing and training of personnel at Centre de Recherche Médicale et Sanitaire (CERMES) was initiated by experts from the Institut Pasteur de Dakar. The Global Outbreak Alert and Response Network (GOARN), with the support of partners has deployed laboratory experts from Institute Pasteur Dakar to enhance laboratory capacity in Niamey, Niger. Specifically, they tested specimens and trained 6 local experts on lab testing (serology).

Personnel have been deployed by the Food and Agriculture Organization (FAO) and the World Organisation for Animal Health (OIE) Crisis Management Centre to participate in a joint field outbreak investigation, supporting the MoH and MoL, and in response activities.

Engagement of the regional AFR-EDPLN (WHO African Region-Emerging and Dangerous Pathogens Laboratory Network) has been initiated to support the enhancement of laboratory capacity in neighbouring countries.

Reinforcement and replenishing of laboratory reagents and supplies has been facilitated by WHO African region. Provision of triple packaging for specimen transport has been facilitated by WHO African region.

A comprehensive outbreak investigation protocol is being developed by WHO country office with support from WHO headquarters and African region. Funds are being mobilized to implement critical response activities. In the areas of surveillance, laboratory, and risk communication entomology

WHO advice: Any trade measures with regards to imports and exports of live animals, from affected areas, or their products (meat or milk) should follow the "Terrestrial Animal Health Code 2016" of the OIE.

Summary table for epidemiological reports received for Week 46 (14th – 20th November 2016)

(Numbers in brackets indicate deaths)

District	% HU Reporting	AFP	AEIs	Animal Bites	Bacterial Meningitis	Cholera	Dysentery	Guinea Worm	Malaria	Measles	NNT	Plague	Presumptive MDR TB	Typhoid Fever
Abim	70	0	0	1(0)	0	0	4(0)	0	422(0)	0	0	0	0	1(0)
Adjumani	91.4	0	0	1(0)	0	0	25(0)	0	3,312(1)	0	0	0	0	0
Agago	69.2	0	0	5(0)	0	0	9(0)	0	1,853(0)	0	0	0	0	2(0)
Alebtong	83.3	0	0	2(0)	1(0)	0	2(0)	0	920(0)	0	0	0	0	4(0)
Amolatar	92.3	0	0	2(0)	0	0	6(0)	0	1,908(0)	0	0	0	0	8(0)
Amudat	100	0	0	0	0	0	6(0)	0	242(0)	0	0	0	0	2(0)
Amuria	87.2	0	0	3(0)	0	0	5(0)	0	3,313(0)	0	0	0	0	3(0)
Amuru	71.9	0	0	1(0)	0	0	4(0)	0	2,098(0)	0	0	0	0	2(0)
Apac	75.7	0	0	3(0)	0	0	0	0	2,916(0)	0	0	0	0	1(0)
Arua	70.7	0	0	6(0)	0	0	40(0)	0	4,637(0)	0	0	0	1(0)	99(0)
Budaka	93.3	0	0	0	0	0	4(0)	0	2,063(0)	0	0	0	0	3(0)
Bududa	93.3	0	0	0	0	0	9(0)	0	971(0)	2(0)	0	0	0	0
Bugiri	62	0	0	1(0)	0	0	7(0)	0	1,425(1)	0	0	0	0	39(0)

Buhweju	88.2	0	0	0	0	0	0	0	141(0)	0	0	0	0	0
Buikwe	67.9	0	0	0	0	0	13(0)	0	1,626(0)	1(0)	0	0	0	23(0)
Bukedea	68.8	0	0	0	0	0	8(0)	0	1,375(0)	0	0	0	0	7(0)
Bukomansimbi	100	0	0	0	0	0	1(0)	0	751(0)	0	0	0	0	10(0)
Bukwo	87.5	0	0	6(0)	0	0	12(0)	0	348(0)	0	0	0	0	9(0)
Bulambuli	84.2	0	0	0	0	0	2(0)	0	296(0)	0	0	0	0	0
Buliisa	83.3	0	0	0	0	32(0)	7(0)	0	495(2)	0	0	0	0	9(0)
Bundibugyo	96.7	0	0	0	0	0	3(0)	0	1,849(0)	0	0	0	0	24(0)
Bushenyi	76.3	0	0	10(0)	0	0	1(0)	0	1,222(0)	0	0	0	0	28(0)
Busia	96.6	0	0	1(0)	0	0	5(0)	0	3,481(0)	0	0	0	0	7(0)
Butaleja	45.8	0	0	0	0	0	5(0)	0	609(0)	0	0	0	0	7(0)
Butambala	73.9	0	0	1(0)	0	0	0	0	924(1)	0	0	0	0	12(0)
Buvuma	100	0	1(0)	4(0)	0	0	17(0)	0	378(0)	0	0	0	0	4(0)
Buyende	36.4	0	0	0	0	0	1(0)	0	786(0)	0	0	0	0	1(0)
Dokolo	100	0	0	0	0	0	4(0)	0	986(0)	0	0	0	0	5(0)
Gomba	89.5	0	0	0	0	0	0	0	1,175(0)	0	0	0	0	1(0)
Gulu	81.7	0	0	7(0)	0	0	23(0)	0	5,342(3)	0	0	0	7(0)	32(0)
Hoima	48.2	0	0	10(0)	1(1)	0	27(1)	0	2,454(0)	2(0)	0	0	0	71(0)
Ibanda	80.4	0	0	1(0)	0	0	0	0	2,176(0)	0	0	0	0	2(0)
Iganga	66.1	0	0	4(0)	0	0	0	0	4,966(2)	0	0	0	0	0
Isingiro	60	0	0	4(0)	0	0	1(0)	0	1,634(0)	0	0	0	0	19(0)
Jinja	65.4	0	0	5(0)	0	0	11(0)	0	3,414(2)	0	0	0	0	88(0)
Kaabong	70.4	0	0	0	0	0	7(0)	0	886(0)	0	0	0	0	0
Kabale	81.9	0	0	5(0)	0	0	3(0)	0	325(0)	0	0	0	0	2(0)
Kabarole	47.9	0	0	12(0)	0	0	2(0)	0	1,644(0)	0	0	0	0	16(0)
Kaberaido	72	0	0	1(0)	0	0	10(0)	0	1,525(0)	0	0	0	0	4(0)
Kagadi	51.6	0	0	1(0)	0	0	3(0)	0	906(1)	0	0	0	7(0)	38(0)
Kakumiro	58.6	0	0	1(0)	0	0	6(0)	0	755(0)	0	0	2(0)	0	13(0)
Kalangala	35.3	0	0	0	0	0	1(0)	0	127(0)	0	0	0	0	1(0)
Kaliro	81	0	0	0	0	0	0	0	1,940(0)	0	0	0	0	3(0)
Kalungu	67.9	0	0	0	0	0	7(0)	0	951(0)	1(0)	0	0	0	1(0)
Kampala	30.2	0	0	13(0)	0	0	5(0)	0	1,492(0)	4(0)	0	0	0	86(0)
Kamuli	49.2	0	0	0	0	0	3(0)	0	3,120(0)	0	0	0	0	0
Kamwenge	84.1	0	0	2(0)	0	0	1(0)	0	3,238(1)	0	0	0	0	7(0)
Kanungu	81.3	0	0	2(0)	0	0	1(0)	0	1,056(0)	0	0	0	0	38(0)
Kapchorwa	75	0	0	0	0	0	6(0)	0	277(0)	0	0	0	0	0
Kasese	83	0	0	6(0)	0	0	2(0)	0	3,010(0)	1(0)	0	0	0	10(1)
Katakwi	80.8	0	0	0	0	0	0	0	1,207(0)	0	0	0	0	0
Kayunga	75	0	0	1(0)	0	0	12(0)	0	1,668(0)	0	0	0	0	4(0)
Kibaale	100	0	0	1(0)	0	0	3(0)	0	995(0)	0	0	0	0	40(0)
Kiboga	65.6	0	0	3(0)	0	0	5(0)	0	638(0)	0	0	0	0	36(0)
Kibuku	86.7	0	0	0	0	0	3(0)	0	486(0)	0	0	0	0	2(0)
Kiruhura	90.7	0	0	4(0)	0	0	2(0)	0	982(0)	0	0	0	0	10(0)
Kiryandongo	80.8	0	0	11(0)	0	0	5(0)	0	1,829(0)	0	0	0	0	6(0)
Kisoro	88.1	0	0	1(0)	0	0	1(0)	0	202(0)	0	0	0	0	6(0)
Kitgum	81.3	0	0	3(0)	0	0	22(0)	0	3,386(2)	0	0	0	0(3)	15(0)
Koboko	100	0	0	6(0)	0	0	5(0)	0	1,792(0)	0	0	0	8(0)	0
Kole	100	0	0	0	0	0	0	0	1,619(0)	0	0	0	0	0

Kotido	78.9	0	0	8(0)	0	0	39(0)	0	1,635(0)	0	0	0	0	93(0)
Kumi	62.1	0	0	1(0)	0	0	6(0)	0	1,839(0)	0	0	0	0	15(0)
Kween	95.8	0	0	2(0)	0	0	2(0)	0	469(0)	0	0	0	0	1(0)
Kyankwanzi	84	0	0	0	0	0	4(0)	0	988(0)	0	0	0	0	26(0)
Kyegegwa	86.7	0	0	1(0)	0	0	0	0	2,050(0)	0	0	0	0	4(0)
Kyenjojo	68.1	0	0	5(0)	0	0	4(0)	0	2,415(0)	2(0)	0	0	0	19(0)
Lamwo	100	0	0	1(0)	0	0	1(0)	0	3,015(0)	0	0	0	0	0
Lira	100	0	0	1(0)	0	0	13(0)	0	2,196(4)	0	0	0	0	9(0)
Luuka	77.4	0	0	0	0	0	1(0)	0	2,371(0)	0	0	0	0	2(0)
Luwero	73	0	0	3(0)	0	0	8(0)	0	1,581(0)	0	0	0	0	30(0)
Lwengo	74.2	0	0	6(0)	0	0	3(0)	0	1,523(3)	0	0	0	0	11(0)
Lyantonde	33.3	0	0	0	0	0	0	0	197(0)	0	0	0	0	2(0)
Manafwa	79.2	0	0	1(0)	0	0	1(0)	0	1,488(0)	0	0	0	0	12(0)
Maracha	93.3	0	0	0	0	0	6(0)	0	1,411(0)	0	0	0	0	4(0)
Masaka	74.4	0	0	0	0	0	3(0)	0	1,665(0)	0	0	0	0	9(0)
Masindi	76.7	0	0	7(0)	0	0	7(0)	0	1,197(0)	1(0)	0	0	0	11(0)
Mayuge	60.9	0	0	0	0	0	4(0)	0	2,328(0)	2(0)	0	0	0	4(0)
Mbale	93.1	0	0	22(0)	1(0)	0	9(0)	0	2,157(2)	0	1(0)	0	1(0)	78(0)
Mbarara	76.5	0	0	1(0)	0	0	2(0)	0	696(0)	0	0	0	0	11(0)
Mitooma	95.7	0	0	2(0)	0	0	2(0)	0	1,527(0)	0	0	0	0	6(0)
Mityana	66.1	0	0	0	0	0	5(0)	0	2,360(0)	2(0)	0	0	0	8(0)
Moroto	81.3	0	0	7(0)	0	0	14(0)	0	468(0)	0	0	0	0	5(0)
Moyo	100	0	0	2(0)	1(0)	0	16(0)	0	3,922(2)	0	0	0	0	38(0)
Mpigi	80	0	0	0	0	0	1(0)	0	933(0)	0	0	0	0	13(0)
Mubende	71.4	0	0	0	0	0	30(0)	0	3,787(2)	2(0)	0	0	0	98(0)
Mukono	80.8	0	0	18(0)	0	0	15(0)	0	2,032(0)	1(0)	0	0	0	43(0)
Nakapiripirit	88.2	0	0	2(0)	0	0	21(0)	0	1,093(1)	0	0	0	0	10(0)
Nakaseke	83.3	0	0	1(0)	0	0	4(0)	0	728(0)	1(0)	0	0	0	9(0)
Nakasongola	77.1	0	0	5(0)	0	0	21(0)	0	1,320(0)	0	0	0	0	1(0)
Namayingo	65.6	0	0	0	0	0	5(0)	0	1,686(0)	0	0	0	0	15(0)
Namutumba	87.9	0	0	3(0)	0	0	8(0)	0	2,045(0)	0	0	0	0	5(0)
Napak	78.6	0	0	1(0)	0	0	5(0)	0	1,185(0)	0	0	0	0	0
Nebbi	83.7	0	0	12(0)	0	0	24(0)	0	3,120(2)	0	0	3(0)	0	13(0)
Ngora	83.3	0	0	0	0	0	2(0)	0	745(0)	0	0	0	0	2(0)
Ntoroko	88.9	0	0	0	0	0	1(0)	0	181(0)	0	0	0	0	1(0)
Ntungamo	79.6	0	0	5(0)	0	0	0	0	3,923(0)	0	0	0	0	2(0)
Nwoya	100	0	0	0	0	0	0	0	1,776(0)	0	0	0	0	0
Omoro	85.7	0	0	2(0)	0	0	4(0)	0	2,737(0)	0	0	0	0	5(0)
Otuke	76.5	0	0	2(0)	0	0	3(0)	0	786(0)	0	0	0	0	9(0)
Oyam	97.4	0	0	16(0)	0	0	10(0)	0	4,805(1)	0	0	0	0	29(0)
Pader	74.4	0	0	1(0)	0	0	14(0)	0	2,787(0)	0	0	0	0	14(0)
Pallisa	69.7	0	0	3(0)	0	0	16(0)	0	2,725(1)	0	0	0	0	9(0)
Rakai	52.8	0	0	1(0)	0	0	15(0)	0	3,951(0)	0	0	0	0	21(0)
Rubanda	82.9	0	0	0	0	0	0	0	66(0)	0	0	0	0	0
Rubirizi	68.4	0	0	0	0	0	1(0)	0	411(0)	0	0	0	0	0
Rukungiri	69.7	0	0	2(0)	0	0	1(0)	0	1,632(0)	0	0	0	0	0
Sembabule	87.5	0	0	0	0	0	10(0)	0	1,799(0)	0	0	0	0	4(0)
Serere	90.5	0	0	0	0	0	6(0)	0	2,409(0)	2(0)	0	0	0	5(0)

Sheema	94.3	0	0	6(0)	0	0	0	0	989(0)	1(0)	0	0	0	0
Sironko	86.7	0	0	2(0)	0	0	0	0	1,776(1)	0	0	0	0	0
Soroti	74.3	0	0	0	0	0	3(0)	0	2,884(0)	1(0)	0	0	0	46(0)
Tororo	79.2	0	0	6(0)	0	0	9(0)	0	1,245(0)	0	0	0	0	16(0)
Wakiso	38.8	0	0	42(0)	0	0	8(0)	0	2,460(0)	6(0)	0	0	0	58(0)
Yumbe	73.3	0	0	8(0)	1(0)	0	34(0)	0	3,653(1)	0	0	0	0	5(0)
Zombo	100	0	0	4(0)	0	0	9(0)	0	1,226(0)	0	0	0	0	15(0)
National	78.1	19(0)	0	363(0)	5(1)	32(0)	807(1)	0(0)	200957(36)	32(0)	1(0)	0(0)	24(3)	1707(1)

Key: Yellow: 100% reporting, Green: 80-99% reporting, Red: Below 80% reporting

HU= Health Units, **AFP**=Acute Flaccid Paralysis, **AEIs**= Adverse Events following Immunization, **NNT**=Neonatal Tetanus, **MDR TB**= Multi-Drug Resistant Tuberculosis, **NR** =Not Reported

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Editorial: Dr. I. Nabukenya, Mr. J. Kissa, Dr. C. Kihembo, J. Nguna, Dr. B. Masiira, , Dr. M. Musenero, Mr. M. Mugagga, Dr. J. Wamala, Dr. I. Makumbi, Dr. R. Musoke, Dr. J. Sekajugo, Mr. N. Natseri, Dr. E. Katushabe, Dr. M. Nanyunja

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For comments please contact: The Epidemiological Surveillance Division - MoH; P.O BOX 7272 Kampala, Tel: 0414-340874/0414-345108;
Email: esd@health.go.ug or esduganda@yahoo.co.uk