



Republic of Kenya
Ministry of Public Health and Sanitation

WEEKLY EPIDEMIOLOGICAL BULLETIN

Week 19

Week ending 16th May 2010

Provincial & national surveillance indicators for week 19

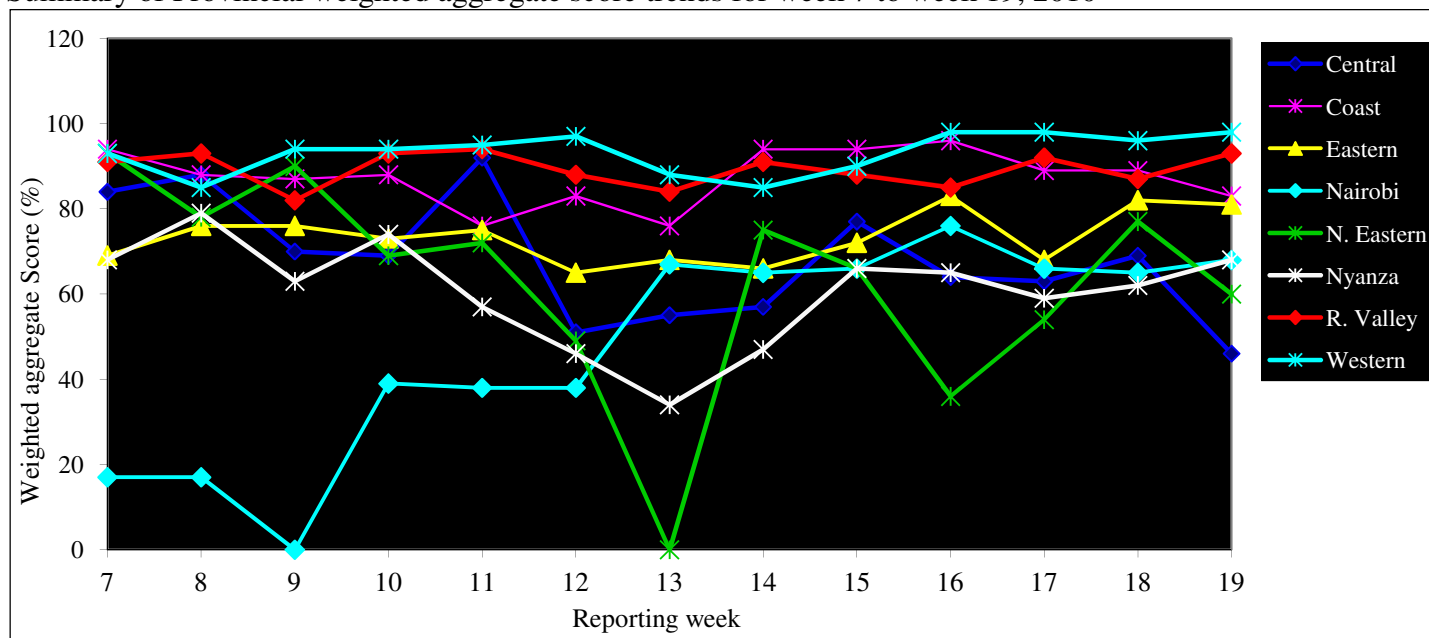
Province	No. of Districts	Reporting on time	Complete reports	Intra-district facility RR (%)	Timeliness (%)	Completeness of reports (%)	Weighted aggregate score (%)
Central	11	4	4	32	36	100	46
Coast	13	11	11	73	85	100	83
Eastern	28	25	25	60	89	100	81
Nairobi	3	2	2	54	67	100	68
N. Eastern	11	7	7	34	64	100	60
Nyanza	21	14	14	54	67	100	68
R. Valley	43	43	43	78	100	100	93
Western	19	19	19	93	100	100	98
National	149	125	125	63	84	100	80

✦ The national average district reporting rate declined to 84%

✦ The national weighted aggregate score also declined marginally to 80%

✦ Congratulations to **R. Valley** and **Western** for posting 100% district reporting

Summary of Provincial weighted aggregate score trends for week 7 to week 19, 2010



Reports not received from the following 24 Districts

Gatundu, Kiambu East, Murang'a North, Nyandarua North, Nyandarua South, Nyeri South, Thika, Kwale, Malindi, Igembe, Kibwezi, Meru Central, Nairobi East, Fafi, Ijara, Wajir West, Wajir East, Borabu, Homa Bay, Kisii Central, Kuria West, Migori, Siaya, South Gucha

- ✦ Nationally:
 - The surveillance weighted aggregate score declined from 81% to 80%
 - The number of districts that submitted reports on time also decreased from 128 (86%) to 125 (84%)
 - The intra-district average reporting rate decreased marginally from 64% to 63%
- ✦ Best performing provinces:
 - Western (98%) and Rift Valley (93%) Provinces had the highest weighted aggregate score while Central (46%) and North Eastern (60%) Provinces had the lowest score
 - Western and Rift Valley posted 100% district reporting rate while Central had the lowest rate at 36% (down from 73% in week 18)
 - Western (93%) Province had the highest intra-district facility reporting rate while Central (32%) and North Eastern (34%) had the lowest rates
- ✦ Most improved provinces:
 - Intra-district facility RR: Nairobi (46% to 54%) and Western (87% to 93%) improved the most while Central (47% to 32%) declined the most
 - District reporting rate: Nyanza (57% to 67%) and Rift Valley (93% to 100%) improved the most while Central (73% to 36%) and North Eastern (91% to 64%) declined the most
- ✦ Stability: Western and Rift Valley Provinces are the most consistent while North Eastern and Central have fluctuated the most
- ✦ We recognize the 27 (18%) districts [up from 23 (15%) districts in week 18] that attained 100% intra-district reporting: Kilindini, Taita, Taveta, Maara, Meru South, Gucha, Kisii South, Kuria East, Bureti, Eldoret East, Kwanza, Laikipia North, Sotik, Trans Nzoia East, Trans Nzoia West, Bunyala, Butere, East Bungoma, Emuhaya, Kakamega Central (Lurambi), Kakamega East (Shinyalu), Kakamega North (Malava), Kakamega South (Ikolomani), Lugari, Mt Elgon, Samia, South Bungoma

Disease specific reports

Cholera

- ✦ 85 cases (a fall from 93 in week 18) were reported in week 19 with no death
- ✦ 67 (79%) cases were reported from West Pokot District while the remaining cases were reported from Kilifi (7), Tharaka (5), Nairobi West (4) and Mombasa (2)

Measles

- ✦ Eleven suspected cases (up from 3 in week 18) were reported with no death
- ✦ Cases reported from Pokot Central (4), Loitokitok (3), Kirinyaga (1), Laikipia East (1), Molo (1) and Transmara (1)
- ✦ The laboratory surveillance system investigated 10 case specimen from 9 districts
All (100%) tested negative for measles IgM and were therefore classified as discarded
Only 1 (10%) tested positive for rubella

Malaria

- ✦ Reported cases declined from 167,298 to 162,588 in week 19
- ✦ Mortality conversely rose from 38 to 48 in week 19
- ✦ Overall, 46,231 cases (28%) were laboratory tested, yielding a positivity rate of 41% (up from 37%)

Dysentery

- ✦ The number of reported cases rose from 1,558 to 1,829 with no death

Typhoid fever

- ✦ Reported cases rose from 4,220 to 4,707 with 1 death reported from Kakamega South (Ikolomani)

AFP

- ✦ There were no cases reported

Meningococcal Meningitis

- ✦ Three cases were reported from East Bungoma district

For comments please contact:

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Summary of Weekly Integrated Disease Surveillance and Response Report for week 19

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[illegible]

Province	District	Reports Expected	% RR	Cholera	Dysentery	Malaria	Malaria Tested	Malaria Positive	Measles	MM	Typhoid	NNT	AFP	VHF	Plague	Yellow Fever
North Eastern																
	Fafi	9	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Garissa	23	48	0(0)	0(0)	947(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Ijara	9	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Lagdera	13	46	0(0)	4(0)	351(0)	44	9	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Mandera Central	9	78	0(0)	0(0)	435(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Mandera East	8	50	0(0)	16(0)	115(0)	0	0	0(0)	0(0)	9(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Mandera West	8	75	0(0)	0(0)	525(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Wajir West	11	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Wajir East	11	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Wajir North	8	50	0(0)	0(0)	131(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Wajir South	13	31	0(0)	0(0)	209(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Nyanza																
	Bondo	25	92	0(0)	49(0)	3017(1)	649	378	0(0)	0(0)	58(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Borabu	14	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Gucha	35	100	0(0)	0(0)	2171(0)	0	0	0(0)	0(0)	67(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Homa Bay	40	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Kisii Central	42	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Kisii South	11	100	0(0)	8(0)	593(0)	281	60	0(0)	0(0)	8(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Kisumu East	54	81	0(0)	3(0)	4407(0)	2110	1004	0(0)	0(0)	18(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Kisumu West	17	88	0(0)	25(0)	2330(0)	0	0	0(0)	0(0)	15(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Kuria East	12	100	0(0)	5(0)	324(0)	40	7	0(0)	0(0)	6(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Kuria West	24	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Manga	17	94	0(0)	0(0)	280(0)	50	8	0(0)	0(0)	4(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Masaba	36	67	0(0)	80(0)	1083(0)	409	33	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Migori	42	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Nyamira	45	96	0(0)	0(0)	956(2)	245	24	0(0)	0(0)	32(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Nyando	42	81	0(0)	1(0)	2003(0)	240	160	0(0)	0(0)	4(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Rachuonyo	34	76	0(0)	3(0)	1639(0)	0	0	0(0)	0(0)	27(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Rarienda	18	94	0(0)	6(0)	2205(0)	772	375	0(0)	0(0)	58(0)	0(0)	0(0)	0(0)	0(0)	0(0)

Province	District	Reports Expected	% RR	Cholera	Dysentery	Malaria	Malaria Tested	Malaria Positive	Measles	MM	Typhoid	NNT	AFP	VHF	Plague	Yellow Fever
	Rongo	32	69	0(0)	0(0)	1418(0)	0	0	0(0)	0(0)	17(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Siaya	70	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	South Gucha	14	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Suba	40	98	0(0)	29(0)	1838(0)	178	52	0(0)	0(0)	15(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Rift Valley																
	Baringo	50	66	0(0)	0(0)	478(0)	0	0	0(0)	0(0)	13(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Baringo North	33	61	0(0)	18(0)	330(0)	0	0	0(0)	0(0)	4(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Bomet	38	92	0(0)	2(0)	1467(0)	365	50	0(0)	0(0)	58(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Bureti	32	100	0(0)	0(0)	1936(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	East Pokot	9	33	0(0)	0(0)	595(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Eldoret East	36	100	0(0)	0(0)	1438(0)	635	212	0(0)	0(0)	19(0)	DNR	0(0)	0(0)	0(0)	0(0)
	Eldoret West	40	68	0(0)	4(0)	1832(0)	707	215	0(0)	0(0)	116(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Kajiado	35	60	0(0)	33(0)	894(0)	172	130	0(0)	0(0)	51(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Keiyo	36	86	0(0)	5(0)	908(0)	165	44	0(0)	0(0)	30(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Kericho	40	70	0(0)	0(0)	1182(0)	204	29	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Kipkelion	38	58	0(0)	0(0)	581(0)	0	0	0(0)	0(0)	3(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Koibatek	31	90	0(0)	1(0)	628(0)	265	56	0(0)	0(0)	15(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Kwanza	17	100	0(0)	0(0)	1411(0)	626	250	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Laikipia East	14	86	0(0)	0(0)	426(0)	0	0	1(0)	0(0)	3(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Laikipia North	9	100	0(0)	2(0)	148(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Laikipia West	25	88	0(0)	0(0)	844(0)	0	0	0(0)	0(0)	15(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Loitoktok	23	78	0(0)	229(0)	810(0)	0	0	3(0)	0(0)	233(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Marakwet	54	74	0(0)	59(0)	799(0)	225	174	0(0)	0(0)	48(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Molo	34	56	0(0)	0(0)	554(2)	0	0	1(0)	0(0)	9(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Naivasha	35	89	0(0)	16(0)	1391(0)	365	204	0(0)	0(0)	185(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Nakuru	45	91	0(0)	0(0)	727(7)	964	105	0(0)	0(0)	106(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Nakuru North	29	97	0(0)	0(0)	760(0)	0	0	0(0)	0(0)	152(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Nandi Central	22	59	0(0)	0(0)	687(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Nandi East	32	81	0(0)	24(0)	1033(3)	417	96	0(0)	0(0)	7(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Nandi North	20	90	0(0)	0(0)	735(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Nandi South	16	88	0(0)	0(0)	1218(0)	134	50	0(0)	0(0)	26(0)	0(0)	0(0)	0(0)	0(0)	0(0)

Province	District	Reports Expected	% RR	Cholera	Dysentery	Malaria	Malaria Tested	Malaria Positive	Measles	MM	Typhoid	NNT	AFP	VHF	Plague	Yellow Fever
	Narok North	29	59	0(0)	10(0)	514(0)	123	38	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Narok South	30	63	0(0)	27(0)	371(0)	103	26	0(0)	0(0)	26(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	North Pokot	12	67	0(0)	12(0)	631(0)	181	48	0(0)	0(0)	48(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Pokot Central	18	89	0(0)	10(0)	785(0)	198	72	4(0)	0(0)	19(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Samburu	12	75	0(0)	5(0)	354(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Samburu East	15	33	0(0)	0(0)	224(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Samburu North	7	43	0(0)	20(0)	175(0)	0	0	0(0)	0(0)	11(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Sotik	29	100	0(0)	0(0)	1322(0)	230	16	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Tinderet	10	80	0(0)	8(0)	271(0)	227	28	0(0)	0(0)	15(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Trans Nzoia East	20	100	0(0)	0(0)	1058(0)	809	355	0(0)	0(0)	137(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Trans Nzoia West	22	100	0(0)	15(0)	1502(0)	737	170	0(0)	0(0)	7(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Transmara	39	59	0(0)	2(0)	683(0)	200	18	1(0)	0(0)	20(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Turkana Central	32	66	0(0)	25(0)	1330(0)	500	229	0(0)	0(0)	34(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Turkana North	21	86	0(0)	10(0)	776(1)	904	317	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Turkana South	21	67	0(0)	11(0)	737(0)	87	46	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Wareng	37	97	0(0)	0(0)	1031(0)	681	190	0(0)	0(0)	19(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	West Pokot	26	81	67(0)	15(0)	1462(0)	640	181	0(0)	0(0)	97(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Western																
	Bunyala	7	100	0(0)	0(0)	919(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Busia	27	89	0(0)	23(0)	5960(0)	1434	981	0(0)	0(0)	348(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Butere	16	100	0(0)	63(0)	3408(0)	735	367	0(0)	0(0)	86(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	East Bungoma	11	100	0(0)	0(0)	2178(3)	1027	439	0(0)	3(0)	86(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Emuhaya	22	100	0(0)	4(0)	2016(0)	91	74	0(0)	0(0)	75(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Hamisi	13	85	0(0)	9(0)	1054(0)	302	150	0(0)	0(0)	51(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Kakamega Central (Lurambi)	29	100	0(0)	4(0)	4338(0)	2058	1025	0(0)	0(0)	82(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Kakamega East (Shinyalu)	12	100	0(0)	0(0)	1839(0)	699	128	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Kakamega North (Malava)	16	100	0(0)	1(0)	1650(0)	539	318	0(0)	0(0)	60(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Kakamega South (Ikolomani)	9	100	0(0)	0(0)	1105(0)	108	57	0(0)	0(0)	0(1)	0(0)	0(0)	0(0)	0(0)	0(0)
	Lugari	24	100	0(0)	17(0)	2993(0)	0	0	0(0)	0(0)	85(0)	0(0)	0(0)	0(0)	0(0)	0(0)

Province	District	Reports Expected	% RR	Cholera	Dysentery	Malaria	Malaria Tested	Malaria Positive	Measles	MM	Typhoid	NNT	AFP	VHF	Plague	Yellow Fever
	Mt Elgon	16	100	0(0)	2(0)	1122(0)	0	0	0(0)	0(0)	19(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Mumias	26	81	0(0)	23(0)	3853(0)	1416	819	0(0)	0(0)	46(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	North Bungoma	11	91	0(0)	0(0)	986(0)	419	223	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Samia	9	100	0(0)	0(0)	755(0)	94	40	0(0)	0(0)	758(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	South Bungoma	22	100	0(0)	101(0)	4009(20)	1355	655	0(0)	0(0)	103(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Teso	20	70	0(0)	18(0)	3153(2)	293	181	0(0)	0(0)	81(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Vihiga	21	86	0(0)	0(0)	2317(0)	1445	674	0(0)	0(0)	31(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	West Bungoma	20	85	0(0)	96(0)	1964(0)	1256	809	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)

	Cholera	Dysentery	Malaria	Malaria* Tested	Malaria* Positive	Measles	MM	Typhoid	NNT	AFP	VHF	Plague	Yellow Fever
Weeks summary	85(0)	1,829(0)	162,588(48)	46,231	19,141	11(0)	3(0)	4,707(1)	0(0)	0(0)	0(0)	0(0)	0(0)
Years cumulative summary	1,497 (23)	22,614 (11)	2,868,317 (743)	453,912	179,356	260 (0)	51 (14)	64,775 (8)	0 (0)	20 (0)	0 (0)	0 (0)	0 (0)

* From week 10 of 2010 (Excludes week 1 up to week 9)

Key

DNR: District did not report for this disease

AFP: Acute Flaccid Paralysis

NNT: Neonatal Tetanus

HF: Health Facilities

Timely reports: Reports received before Wednesday

Completeness (Intra-district): Proportion of health facilities reporting in a district/province

Timeliness: Proportion of district in a province/country reporting on time

Weighted Aggregate Score: Composite Surveillance Score (3 for Timeliness, 2 for Completeness and 1 for Complete reports)

MM: Meningococcal Meningitis

VHF: Viral Hemorrhagic Fever

NEP: North Eastern Province

% RR: Health Facility reporting rate for this week