



**Republic of Kenya**  
**Ministry of Public Health and Sanitation**

## WEEKLY EPIDEMIOLOGICAL BULLETIN

**Week 12**

**Week ending 28<sup>th</sup> March 2010**

Provincial & national surveillance indicators for week 12

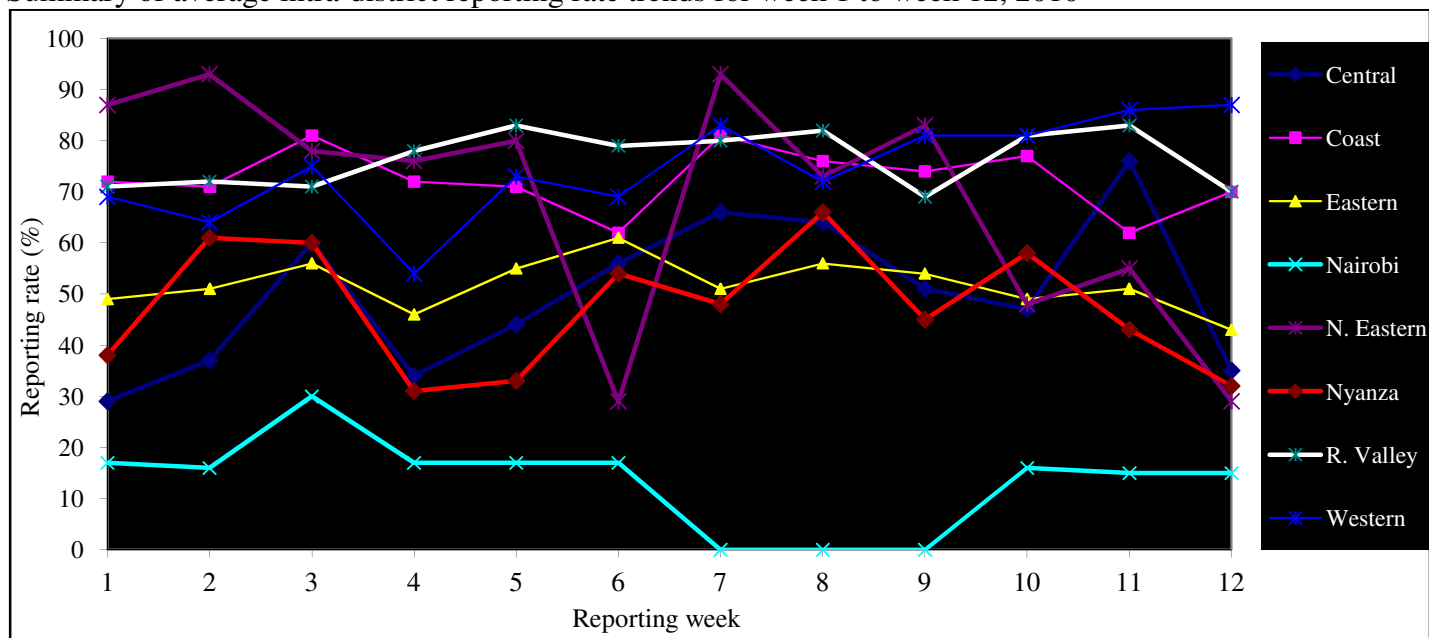
Province	No. of Districts	Reporting on time	Complete reports	Intra-district facility RR (%)	Timeliness (%)	Completeness of reports (%)	Weighted aggregate score (%)
Central	11	5	5	35	45	100	51
Coast	13	11	11	70	85	100	83
Eastern	28	19	19	43	68	100	65
Nairobi	3	1	1	15	33	100	38
N. Eastern	11	5	5	29	45	100	49
Nyanza	21	8	8	32	38	100	46
R. Valley	43	41	41	70	95	100	88
Western	19	19	19	92	100	100	97
<b>National</b>	<b>149</b>	<b>109</b>	<b>109</b>	<b>52</b>	<b>73</b>	<b>100</b>	<b>71</b>

✦ The national average district reporting rate declined from 85% to 73%

✦ The national weighted aggregate score declined from 81% to 71%

✦ Congratulations to Western Province for attaining 100% district RR

Summary of average intra-district reporting rate trends for week 1 to week 12, 2010



### Reports not received from the following Districts

Gatundu, Kiambu East, Murang'a North, Nyandarua North, Nyandarua South, Thika, Malindi, Msambweni, Chalbi, Garbatula, Igembe, Imenti South, Kibwezi, Moyale, Nzau, Tharaka, Yatta, Nairobi East, Nairobi North, Fafi, Mandera Central, Mandera East, Wajir West, Wajir East, Wajir South, Bondo, Borabu, Homa Bay, Kisii Central, Kisii South, Kisumu East, Kisumu West, Kuria East, Manga, Migori, Nyamira, Nyando, Suba, Loitokitok, Marakwet

<p>⊕ Nationally:</p> <ul style="list-style-type: none"> <li>The week was characterized by a drop in performance by most provinces</li> <li>The surveillance weighted aggregate score declined markedly from 81% to 71%</li> <li>The number of districts that submitted reports on time reduced from 126 (85%) to 109 (73%)</li> <li>The intra-district average reporting rate fell from 64% in week 11 to 52% in week 12</li> </ul> <p>⊕ Best performing provinces:</p> <ul style="list-style-type: none"> <li>Western Province retained the highest weighted score at 97% (an improvement from 95%) while Nairobi province still had the lowest score at 38%</li> <li>All districts in Western Province reported (100% district reporting rate)</li> <li>Nairobi Province had the lowest district reporting rate at 33%</li> <li>Western (92%), Rift Valley (70%) and Central (70%) provinces had the highest intra-district facility reporting rates</li> </ul> <p>⊕ Most improved provinces:</p> <ul style="list-style-type: none"> <li>Intra-district facility RR: Coast (62% to 70%) and Western (86% to 92%) are the only provinces that improved in performance while Central (76% to 35%) and North Eastern (55% to 29%) Provinces posted the highest decline</li> <li>District reporting rate: Only Coast Province posted improvement with 8% points (from 77% to 85%) while Central (100% to 45%) and North Eastern (73% to 45%) Provinces had the biggest decline</li> </ul> <p>⊕ Stability: Rift Valley and Western Provinces have had the least fluctuations while North Eastern and Nyanza Provinces have fluctuated the most</p> <p>⊕ We recognize the 19 (13%) districts (an increase from 15 districts in week 11) that attained 100% intra-district reporting: Kilindini, Taveta, Maara, Meru South, Gucha, Masaba, Bomet, Sotik, Trans-Nzoia East, Trans-Nzoia West, Busia, East Bungoma, Kakamega East, Kakamega North, Lugari, Mt. Elgon, Samia, South Bungoma and West Bungoma</p>	<p style="text-align: center;"><b>Disease specific reports</b></p> <p><b>Cholera</b></p> <ul style="list-style-type: none"> <li>⊕ 103 cases with 0 deaths were reported in week 12, a rise from 14 cases and 0 deaths in week 11</li> <li>⊕ Nairobi West District reported 82 (80%) cases while Mombasa District (15) and Kilindini District (6) reported the rest</li> <li>⊕ Tharaka &amp; Msambweni districts which had outbreak during this week did not submit weekly reports</li> </ul> <p><b>Measles</b></p> <ul style="list-style-type: none"> <li>⊕ There was a fall in the number of reported suspected cases from 32 in week 11 to 17 in week 12 with no death</li> <li>⊕ Cases reported from Laikipia East (4), Naivasha (4), Kirinyaga (3), Mwingi (2), Trans-Nzoia West (2), East Bungoma (1) and Molo (1) districts</li> <li>⊕ The laboratory surveillance system investigated 15 case specimen (down from 36 in week 11) during the week. Four (27%) from Nairobi North district tested positive for measles IgM while 10 (67%) from 9 other districts were finally classified as discarded. Results for 1 specimen were missing</li> </ul> <p><b>Malaria</b></p> <ul style="list-style-type: none"> <li>⊕ Reported cases fell from 159,694 in week 11 to 121,636 cases in week 12</li> <li>⊕ Mortality also fell from 43 cases to 39 cases</li> <li>⊕ Overall, 36,466 cases (30%) were laboratory tested, yielding a positivity rate of 38%</li> </ul> <p><b>Dysentery</b></p> <ul style="list-style-type: none"> <li>⊕ There was a decline in the number of reported cases from 1,240 in week 11 to 829 cases with no death</li> </ul> <p><b>Typhoid fever</b></p> <ul style="list-style-type: none"> <li>⊕ Reported cases reduced further from 3,429 to 2,794</li> <li>⊕ One death was reported in Keiyo District</li> </ul> <p><b>AFP</b></p> <ul style="list-style-type: none"> <li>⊕ There was a decline of reported cases from 5 in week 11 to only 1 in week 12 with no death</li> <li>⊕ The case reported from Turkana South District tested negative for polio virus</li> </ul> <p><b>Meningococcal Meningitis</b></p> <ul style="list-style-type: none"> <li>⊕ 1 case (down from 3 in week 11) was reported from South Bungoma district. The case died</li> </ul>
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**Editorial: Dr. C. Nzioka, Dr. M. Ope, Dr. D. Langat, Dr P. Muthoka, Dr. O. Shikanga, C. Njuguna, J. Njau, J. Njoroge, E. Kathini, A. Muange, H. Limo, R. Kalani, P. Njiru, D. Mwangi, Z. Irura**

## Summary of Weekly Integrated Disease Surveillance and Response Report for week 12

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Province	District	Reports Expected	% RR	Cholera	Dysentery	Malaria	Malaria Tested	Malaria Positive	Measles	MM	Typhoid	NNT	AFP	VHF	Plague	Yellow Fever
Nairobi																
	Nairobi East	61	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Nairobi North	97	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Nairobi West	71	49	82(0)	35(0)	681(0)	1117	535	0(0)	0(0)	82(0)	0(0)	0(0)	0(0)	0(0)	0(0)
North Eastern																
	Fafi	7	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Garissa	23	43	0(0)	0(0)	553(0)	286	173	0(0)	0(0)	13(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Ijara	10	56	0(0)	0(0)	112(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Lagdera	9	38	0(0)	0(0)	334(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Mandera Central	13	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Mandera East	9	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Mandera West	8	63	0(0)	0(0)	376(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Wajir West	8	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Wajir East	8	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Wajir North	28	50	0(0)	0(0)	200(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Wajir South	8	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Nyanza																
	Bondo	25	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Borabu	14	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Gucha	35	100	0(0)	0(0)	2556(0)	0	0	0(0)	0(0)	33(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Homa Bay	20	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	16	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Kisumu East	55	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Kisumu West	17	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Kuria East	12	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Kuria West	24	46	0(0)	5(0)	671(0)	0	0	0(0)	0(0)	20(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Manga	14	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
	Masaba	30	100	0(0)	0(0)	800(0)	243	15	0(0)	0(0)	29(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	0	DNR	DNR	DNR	0	0	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR

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Province	District	Reports Expected	% RR	Cholera	Dysentery	Malaria	Malaria Tested	Malaria Positive	Measles	MM	Typhoid	NNT	AFP	VHF	Plague	Yellow Fever
	Nandi East	32	78	0(0)	36(0)	884(1)	434	70	0(0)	0(0)	17(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Nandi North	20	95	0(0)	0(0)	742(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Nandi South	16	69	0(0)	8(0)	676(0)	0	0	0(0)	0(0)	5(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Narok North	29	55	0(0)	0(0)	555(0)	0	0	0(0)	0(0)	11(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Narok South	30	57	0(0)	24(0)	531(0)	147	57	0(0)	0(0)	13(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	North Pokot	12	75	0(0)	2(0)	562(0)	213	68	0(0)	0(0)	27(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Pokot Central	18	89	0(0)	8(0)	861()	272	132	0(0)	0(0)	40(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Samburu	12	58	0(0)	22(0)	438(0)	0	0	0(0)	0(0)	37(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Samburu East	15	27	0(0)	0(0)	223(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)	0(0)	221(0)	0	0	0(0)	0(0)	19(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Sotik	29	100	0(0)	0(0)	1149(0)	166	12	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Tinderet	10	80	0(0)	1(0)	259(0)	226	25	0(0)	0(0)	16(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Trans Nzoia East	20	100	0(0)	0(0)	868(0)	740	348	0(0)	0(0)	88(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Trans Nzoia West	22	100	0(0)	11(0)	1428(1)	691	184	2(0)	0(0)	6(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Transmara	37	62	0(0)	14(0)	1143(0)	272	16	0(0)	0(0)	15(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Turkana Central	32	59	0(0)	12(0)	1431(1)	545	261	0(0)	0(0)	17(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Turkana North	21	86	0(0)	9(0)	768(0)	677	167	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Turkana South	21	38	0(0)	11(0)	434(0)	58	23	0(0)	0(0)	5(0)	0(0)	1(0)	0(0)	0(0)	0(0)
	Wareng	37	95	0(0)	0(0)	1256(0)	774	305	0(0)	0(0)	28(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	West Pokot	26	85	0(0)	3(0)	1459(5)	547	155	0(0)	0(0)	114(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Western																
	Bunyala	7	86	0(0)	0(0)	880(0)	0	0	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Busia	27	100	0(0)	62(0)	3523(0)	1374	867	0(0)	0(0)	215(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Butere	16	88	0(0)	44(0)	2070(0)	607	257	0(0)	0(0)	39()	0(0)	0(0)	0(0)	0(0)	0(0)
	East Bungoma	11	100	0(0)	0(0)	1767(2)	1009	381	1(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Emuhaya	21	95	0(0)	3(0)	1209(0)	102	17	0(0)	0(0)	42(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Hamisi	13	92	0(0)	4(0)	1010(0)	177	76	0(0)	0(0)	35(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Kakamega Central (Lurambi)	29	93	0(0)	0(0)	3275(0)	1483	662	0(0)	0(0)	81(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Kakamega East (Shinyalu)	12	100	0(0)	0(0)	1116(0)	438	87	0(0)	0(0)	4(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Kakamega North	16	100	0(0)	0(0)	1088(0)	274	118	0(0)	0(0)	51(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
	(Malava)															
	Kakamega South (Ikolomani)	10	80	0(0)	2(0)	739(0)	62	34	0(0)	0(0)	1(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Lugari	24	100	0(0)	1(0)	2066(0)	0	0	0(0)	0(0)	29(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Mt Elgon	16	100	0(0)	16(0)	1094(0)	0	0	0(0)	0(0)	37(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Mumias	26	85	0(0)	0(0)	2358(0)	1022	481	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	North Bungoma	11	55	0(0)	0(0)	377(0)	286	196	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Samia	9	100	0(0)	9(0)	803(0)	81	36	0(0)	0(0)	5(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	South Bungoma	24	100	0(0)	16(0)	1848(7)	634	267	0(0)	1(1)	24(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Teso	16	75	0(0)	28(0)	2307(4)	224	78	0(0)	0(0)	41(0)	0(0)	0(0)	0(0)	0(0)	0(0)
	Vihiga	21	81	0(0)	0(0)	1797()	641	385	0(0)	0(0)	162()	0(0)	0(0)	0(0)	0(0)	0(0)
	West Bungoma	20	100	0(0)	100(0)	2431(0)	1261	391	0(0)	0(0)	100(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
				103(0)	829(0)	121636(39)	36466	13777	17(0)	1(1)	2794(1)	0(0)	1(0)	0(0)	0(0)	0(0)

## 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