



Measles and rubella surveillance summary and data analysis of selected performance indicators - EMR, Week 52 2010

As of December 2010, case-based surveillance with laboratory confirmation of measles and rubella is functional in 22 EMR member states but operating nation wide in 19 countries of the EMR.

A. Measles reported data January to December 2009 and January to December 2010:

Country	Reported cases of measles suspects		No. cases tested for measles		Total Measles cases		Measles Laboratory confirmed		measles incidence		Total Rubella cases	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
Afghanistan	2446	2446	1982	1982	1989	1989	1528	1528	76.80	76.8	45	45
Bahrain	106	106	106	106	0	0	0	0	0.00	0.0	6	6
Djibouti	4	4	4	4	0	0	0	0	0.00	0.0	0	0
Iran	2641	2641	2345	2345	553	553	257	257	7.51	7.5	23	23
Iraq	890	890	823	823	283	283	210	210	8.75	8.8	13	13
Jordan	115	115	115	115	0	0	0	0	0.00	0.0	0	0
Egypt	406	406	406	406	14	14	14	14	0.18	0.2	15	15
Kuwait	571	571	571	571	42	42	14	14	11.54	11.5	25	25
Lebanon	73	73	59	59	20	20	3	3	4.93	4.9	1	1
Libya	180	180	180	180	54	54	54	54	9.64	9.6	31	31
Morocco	1057	1057	1023	1023	497	497	466	466	17.31	17.3	3	3
Oman	459	459	458	458	3	3	3	3	0.95	0.9	2	2
Pakistan	1807	1807	1804	1804	1011	1011	1008	1008	6.17	6.2	206	206
Palestine	97	97	97	97	1	1	1	1	0.25	0.3	2	2
Qatar	160	160	125	125	98	98	64	64	59.79	59.8	16	16
Saudi Arabia	901	901	796	796	403	403	297	297	15.88	15.9	26	26
Somalia	578	578	68	68	562	562	46	46	66.59	66.6	0	0
Sudan	1549	1549	1107	1107	594	594	150	150	15.17	15.2	302	302
Syria	289	289	280	280	9	9	0	0	0.45	0.4	0	0
Tunisia	274	274	254	254	0	0	0	0	0.00	0.0	155	155
UAE	138	138	103	103	77	77	42	42	16.16	16.2	10	10
Yemen	1108	1108	1024	1024	355	355	260	260	15.52	15.5	154	154
Total EMR	15849	15849	13730	13730	6565	6565	4417	4417	11.68	11.68	1035	1035

Grey cells = No data reported

B. Surveillance performance indicators:

Measles suspected cases tested between January to December 2010 were 13730 cases compared to 13730 between January to December 2009. The target of 80% of suspected cases tested for measles was met in 19 countries of the 22 countries reported between January to December 2010, 19 countries met this indicator between January to December 2009.

The indicator of 80% of measles cases with complete investigation was met in 21 countries between January to December 2010, 21 countries meet this indicator January to December 2009.

C. Measles Laboratory performance:

The target of 80% and more of the results reported back within 7 days between January to December 2010 was met in 18 countries of the 22 reported countries.

The target of 80% and more of the specimens to be received at the lab within seven days of specimen collection date between January to December 2010 was met in 15 of the 22 reported countries.

The target of 80% and more of the specimens received at the Lab in good condition between January to December 2010 was met in 21 countries of the 22 reported countries.

Table 1: Cumulative measles/rubella case counts and surveillance indicators
Between 01/01/2010& 30/12/2010

Country	Measles case finding report							Rubella case finding report					** Measles incidence	*** Measles Reporting rate	Indicators target>80%					Reporting period		Virus Genotypes		Importation	
	Total suspected cases for measles/rubella	Number of specimens tested for measles	Measles Lab confirmed	Measles Epi-Linked	Measles clinically compatible	Total measles	Discarded Measles cases	Number of specimens tested for rubella	Rubella Lab confirmed	Rubella Epi-Linked	Total rubella	Discarded rubella			* % of suspects tested for measles	% of cases with complete investigation	% of specimens received at the Lab within 7 days	% of adequate specimens	% of results reported to EPI within 7 days	Months	Date	Measles	Rubella	Cases	Measles genotypes
Afghanistan	2446	1982	1528	370	91	1989	457	458	45	0	45	413	76.80	1.76	95%	100.0%	79%	88%	100%	12	29/12/2010				
Bahrain	106	106	0	0	0	0	106	106	6	0	6	100	0.00	9.58	100%	100.0%	99%	100%	100%	12	23/12/2010	D8		2	D8
Djibouti	4	4	0	0	0	0	4	4	0	0	0	4	0.00	0.49	100%	100.0%		100%		4	01/04/2010				
Iran	2641	2345	257	0	296	553	2088	2345	23	0	23	2322	7.51	2.84	89%	100.0%	100%	100%	100%	12	13/01/2011	D4			
Iraq	890	823	210	0	73	283	607	815	13	0	13	802	8.75	1.88	92%	100.0%	77%	100%	100%	12	28/12/2010	D4			
Jordan	115	115	0	0	0	0	115	115	0	0	0	115	0.00	1.92	100%	97.4%	91%	99%	99%	12	21/12/2010				
Egypt	406	406	14	0	0	14	392	406	15	0	15	391	0.18	0.51	100%	99.0%	93%	100%	100%	12	03/01/2011				
Kuwait	571	571	14	0	28	42	529	571	25	0	25	546	11.54	14.53	100%	99.8%	100%	100%	100%	12	31/12/2010	D8			
Lebanon	73	59	3	0	17	20	53	61	1	0	1	60	4.93	1.31	81%	98.6%	57%	100%	100%	12	29/12/2010				
Libya	180	180	54	0	0	54	126	180	31	0	31	149	9.64	2.25	100%	97.2%	100%	100%	100%	11	02/12/2010	B3			
Morocco	1057	1023	466	0	31	497	560	634	3	0	3	631	17.31	1.95	97%	99.1%	90%	100%	97%	12	02/01/2011	D4			
Oman	459	458	3	0	0	3	456	458	2	0	2	456	0.95	14.37	100%	100.0%	82%	96%	100%	12	31/12/2010	B3,D4		3	B3,D4
Pakistan	1807	1804	1008	0	3	1011	796	1804	206	0	206	1598			100%	99.5%	82%	100%	89%	12	26/12/2010	D4			
Palestine	97	97	1	0	0	1	96	97	2	0	2	95	0.25	2.44	100%	94.8%	90%	100%	100%	12	30/12/2010				
Qatar	160	125	64	0	34	98	62	111	16	0	16	95	59.79	3.78	78%	100.0%	97%	100%	38%	12	28/11/2010	D4			
Saudi Arabia	901	796	297	0	106	403	498	360	26	0	26	334	15.88	1.96	88%	98.6%	70%	100%	56%	12	09/03/2011	B3			
Somalia	578	68	46	13	503	562	16	68	0	0	0	68			12%	99.5%	96%	95%	96%	11	02/12/2010	B3			
Sudan	1549	1107	150	400	44	594	955	1094	293	9	302	801	15.17	2.44	97%	99.0%	97%	100%	98%	11	30/11/2010	B3			
Syria	289	280	0	0	9	9	280	279	0	0	0	279	0.45	1.39	97%	100.0%	98%	93%	100%	12	05/12/2010				
Tunisia	274	254	0	0	0	0	274	254	135	20	155	119	0.00	2.63	100%	95.6%	74%	100%		6	30/06/2010				
UAE	138	103	42	2	33	77	61	60	10	0	10	50	16.16	1.28	76%	24.6%	92%		99%	12	02/01/2011				
Yemen	1108	1024	260	75	20	355	753	1024	154	0	154	870	15.52	3.29	99%	99.7%	76%	99%	99%	11	28/12/2010	B3			

Individual equivocal cases of measles and rubella added in total cases are described in the following pages.

Pakistan, Somalia figures are derived from sentinel surveillance sites.

Definition of importation :Case exposed out side the country during the period of 7 to 21 days prior to rash onset; supported by epi and/or virological evidence.

* excluding Epi-Linked cases.

** This figure represents the measles lab confirmed+measles Epi linked +measles clinically compatible cases/per million.

*** This figure represents the rate of non-measles suspected cases/100,000 population.

Green cells= indicator met.
Yellow cells=indicator not met.
Red cells=missing data for calculating indicator.
Gray cells=no data reported

Cases which have been completely investigated contains:

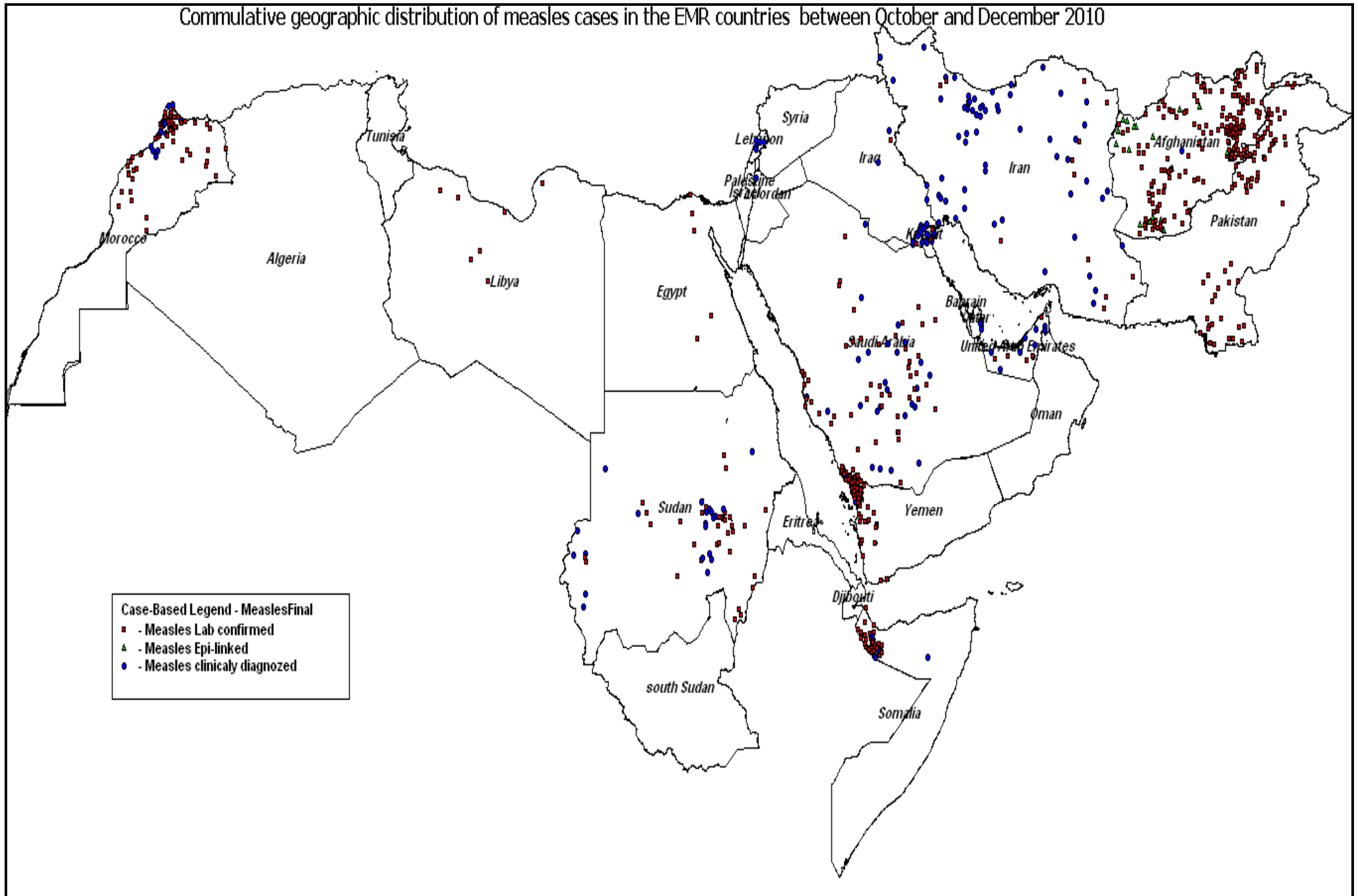
- district.
- Age.
- Gender.
- date of onset.
- known vaccination status.
- Date last vaccination.
- Date specimen collected.

Measles case finding and distribution by Month

Between 01/01/2010 and 31/12/2010

Country	Total Suspected cases for	Total specimens collected	Measles Lab confirmed	Measles Equivocals	Vaccine related	Measles Epi-Linked	Measles clinically compatible	Total Measles	January	February	March	April	May	June	July	August	September	October	November	December
Afghanistan	2446	1982	1528	4	0	370	91	1989	393	289	241	210	196	180	134	91	42	37	35	141
Bahrain	106	106	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Djibouti	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iran	2641	2345	257	2	7	0	296	553	18	25	31	66	115	70	83	43	30	28	21	23
Iraq	890	823	210	0	0	0	73	283	57	46	42	48	31	35	13	4	2	1	2	2
Jordan	115	115	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egypt	406	406	14	0	4	0	0	14	0	0	0	2	2	4	0	0	1	1	0	4
Kuwait	571	571	14	0	11	0	28	42	0	0	0	3	2	0	0	0	3	7	8	19
Lebanon	73	59	3	4	1	0	17	20	2	1	4	1	2	2	2	1	0	0	3	2
Libya	180	180	54	0	0	0	0	54	1	3	3	2	22	1	5	1	0	6	10	0
Morocco	1057	1023	466	17	9	0	31	497	0	4	35	112	145	64	23	13	10	9	24	58
Oman	459	458	3	4	15	0	0	3	0	0	0	0	0	1	1	1	0	0	0	0
Pakistan	1807	1804	1008	0	0	0	3	1011	125	193	131	44	118	125	97	42	5	33	48	50
Palestine	97	97	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
Qatar	160	125	64	2	0	0	34	98	9	19	11	6	19	11	5	3	4	5	5	1
Saudi Arabi	901	796	297	4	2	0	106	403	10	2	9	14	48	22	18	51	68	80	39	42
Somalia	578	68	46	3	4	13	503	562	60	147	61	86	80	42	33	9	7	21	16	0
Sudan	1549	1107	150	0	0	400	44	594	8	17	122	142	112	46	25	36	31	34	21	0
Syria	289	280	0	1	16	0	9	9	2	0	2	2	1	2	0	0	0	0	0	0
Tunisia	274	254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UAE	138	103	42	0	0	2	33	77	5	3	19	8	10	11	4	0	3	3	5	6
Yemen	1108	1024	260	11	0	75	20	355	91	71	45	18	35	27	18	20	9	13	8	0
Grand Total	15849	13730	4417	52	74	860	1288	6565	781	821	756	764	938	643	461	315	215	278	245	348

Commulative geographic distribution of measles cases in the EMR countries between October and December 2010



Rubella case finding and distribution by Month

Between 01/01/2010 and 31/12/2010

Country	Total Suspected cases for measles/Rubella	Rubella specimens tested	Rubella Lab confirmed	Rubella equivocal	Vaccine related	Rubella Epi-Linked	Total rubella	January	February	March	April	May	June	July	August	September	October	November	December
Afghanistan	2446	458	45	0	0	0	45	4	7	6	4	5	5	3	2	1	2	1	5
Bahrain	106	106	6	0	1	0	6	0	0	1	0	1	3	1	0	0	0	0	0
Djibouti	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iran	2641	2345	23	3	7	0	23	1	0	2	6	1	3	3	2	0	1	1	3
Iraq	890	815	13	0	0	0	13	0	1	1	3	3	2	1	0	0	0	2	0
Jordan	115	115	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egypt	406	406	15	0	4	0	15	0	0	0	0	3	2	4	0	1	1	2	2
Kuwait	571	571	25	0	11	0	25	6	0	6	3	2	1	0	0	0	2	2	3
Lebanon	73	61	1	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0
Libya	180	180	31	0	0	0	31	0	0	0	0	0	0	31	0	0	0	0	0
Morocco	1057	634	3	2	9	0	3	0	0	0	1	1	0	0	0	0	0	0	1
Oman	459	458	2	3	15	0	2	0	0	0	0	0	0	0	1	0	0	1	0
Pakistan	1807	1804	206	0	0	0	206	12	26	31	17	55	49	13	2	0	0	0	1
Palestine	97	97	2	1	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0
Qatar	160	111	16	9	0	0	16	3	1	3	0	1	3	1	0	4	0	0	0
Saudi Arabia	901	360	26	3	2	0	26	2	1	1	2	10	2	1	7	0	0	0	0
Somalia	578	68	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sudan	1549	1094	293	0	0	9	302	26	55	82	22	33	13	17	11	6	20	17	0
Syria	289	279	0	3	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tunisia	274	254	135	0	0	20	155	1	8	14	39	51	42	0	0	0	0	0	0
UAE	138	60	10	0	0	0	10	0	0	0	2	1	0	2	0	1	0	2	2
Yemen	1108	1024	154	0	0	0	154	8	28	40	29	24	7	9	3	2	1	3	0
Grand Total	15849	11304	1006	25	74	29	1035	63	128	187	128	191	132	88	28	15	27	31	17

Commulative geographic distribution of rubella in the EMR countries between October and December 2010

