

**Measles and rubella surveillance summary and data analysis of selected performance indicators -EMR, Week 52 2015**

As of December 2015, case-based surveillance with laboratory confirmation of measles and rubella is functional in 22 EMR member states but operating nation wide in 21 countries of the EMR (Somalia is sentinel site surveillance).

**A. Measles reported data January to December 2014 and January to December 2015**

Country	Reported cases of measles suspects		No.cases tested for measles		Total Measles cases		Measles Laboratory confirmed		Measles incidence		Total Rubella cases	
	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015
Afghanistan	1213	2017	1063	1973	552	1191	492	1154	20.83	36.89	46	60
Bahrain	821	365	821	365	0	0	0	0	0.00	0.00	2	0
Djibouti*	6	33	6	14	6	30	6	11	6.94	34.68	0	0
Iran	3830	6552	3639	6186	60	646	38	563	0.76	8.21	14	45
Iraq	2331	1949	1762	1473	1159	1455	820	1011	34.88	43.79	18	1
Jordan	132	91	132	91	10	0	10	0	1.64	0.00	1	0
Egypt	3837	7291	2877	5381	2274	5431	1314	3521	28.28	60.94	21	53
Kuwait	0	251	0	244	0	18	0	18	0.00	4.96	0	0
Lebanon	362	92	221	53	230	39	101	6	53.95	9.15	3	0
Libya	236	102	236	102	176	87	176	87	30.28	14.97	5	0
Morocco	228	327	215	323	11	17	11	17	0.34	0.53	2	6
Oman	1206	1468	1171	1445	14	0	14	0	4.41	0.00	0	0
Pakistan	2580	1394	2580	1394	1370	337	1370	337	7.74	1.90	320	226
Palestine	183	186	183	186	0	0	0	0	0.00	0.00	0	0
Qatar	263	337	261	327	46	18	45	18	26.54	10.39	20	7
Saudi Arabia	839	1100	808	1056	153	219	152	219	5.39	7.72	23	4
Somalia	1024	119	212	87	989	112	171	80	113.70	12.88	2	1
Sudan	2778	6824	2552	4502	676	3585	527	1416	20.69	87.12	815	1050
Syria	1299	678	1042	678	594	45	337	45	26.51	2.01	5	0
Tunisia	200	238	178	210	16	16	15	11	1.52	1.52	17	23
UAE	556	1004	504	897	344	337	292	250	41.63	40.78	9	175
Yemen	4289	2417	3406	2010	813	468	266	89	35.53	16.82	1165	78
<b>Total EMR</b>	<b>28213</b>	<b>34835</b>	<b>23869</b>	<b>28997</b>	<b>9493</b>	<b>14051</b>	<b>6157</b>	<b>8853</b>	<b>16.01</b>	<b>22.92</b>	<b>2488</b>	<b>1729</b>

**B. Surveillance performance indicators:**

Measles suspected cases tested between January to December 2015 were 28997 cases compared to 23869 between January to December 2014. The target of 80% of suspected cases tested for measles and rubella was met in 19 countries of the 22 countries reported between January to December 2015, 19 countries met this indicator between January to December 2014.

The indicator of 80% of measles cases with complete investigation was met in 17 countries between January to December 2015.

**C. Measles Laboratory performance:**

The target of 80% and more of the results reported back within 4 days between January to December 2015 was met in 11 countries of the 22 reported countries.

The target of 80% and more of the specimens to be received at the lab within 5 days of specimen collection date between January to December 2015 was met in 10 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 2015 was met in 21 countries of the 22 reported countries.

**Notes:**

\*Djibouti reported only Measles data of outbreak in February 2015

# Cumulative measles/rubella case counts and surveillance indicators between

01/01/2015 - 31/12/2015

Country	Measles case finding report							Rubella case finding report					**Measles incidence /1000,000	*** Reporting rate	Indicators : target ≥80%					last Date reported	Genotypes reported
	Total suspected cases for measles	Number specimens tested for measles	Measles Lab confirmed	Measles Epi-Linked	Measles clinically compatible	Total measles	Measles discarded cases	Number of rubella tested	Rubella lab confirmed	Rubella Epi-Linked	Total Rubella	Rubella discarded			*suspects tested for measles	cases with complete investigation	specimens received at the lab within 5days	%specimens with good condition	results reported back within 4days		
Afghanistan	2017	1973	1154	37	0	1191	826	816	60	0	60	756	36.9	2.4	100%	1%	49%	93%	83%	30/12/2015	B3
Bahrain	365	365	0	0	0	0	365	365	0	0	0	365	0.0	29.6	100%	100%	100%	100%	100%	31/12/2015	
Djibouti	33	14	11	1	18	30	3	0	0	0	0	0	34.7	0.3	44%	73%				23/02/2015	
Iran	6552	6186	563	37	46	646	5906	6171	45	0	45	6126	8.2	7.4	95%	99%	85%	100%	95%	31/12/2015	B3, D8
Iraq	1949	1473	1011	444	0	1455	494	1458	1	0	1	1457	43.8	1.5	98%	99%	63%	100%	42%	31/12/2015	D8
Jordan	91	91	0	0	0	0	91	91	0	0	0	91	0.0	1.5	100%	65%	92%	99%	50%	30/12/2015	
Egypt	7291	5381	3521	1601	309	5431	1860	5356	53	0	53	5303	60.9	2.0	95%	100%	93%	100%	31%	31/12/2015	B3
Kuwait	251	244	18	0	0	18	233	224	0	0	0	224	5.0	6.4	97%	99%	37%	100%	5%	25/12/2015	
Lebanon	92	53	6	0	33	39	53	25	0	0	0	16	9.1	1.2	58%	89%	42%	92%	100%	29/12/2015	
Libya	102	102	87	0	0	87	15	102	0	0	0	102	15.0	0.3	100%	100%	8%	92%	5%	25/12/2015	
Morocco	327	323	17	0	0	17	310	302	6	0	6	296	0.5	0.9	99%	96%	85%	100%	61%	30/12/2015	
Oman	1468	1445	0	0	0	0	1468	1445	0	0	0	1445	0.0	46.3	98%	99%	74%	99%	99%	31/12/2015	B3, D8, D9
Pakistan	1394	1394	337	0	0	337	1057	1394	226	0	226	1168	1.9	0.5	100%	92%	62%	100%	80%	31/12/2015	B3
Palestine	186	186	0	0	0	0	186	180	0	0	0	180	0.0	4.5	100%	98%	82%	100%	92%	30/12/2015	
Qatar	337	327	18	0	0	18	319	274	7	0	7	267	10.4	18.0	97%	87%	88%	100%	67%	26/12/2015	B3
Saudi Arabia	1100	1056	219	0	0	219	881	1022	4	0	4	1018	7.7	3.1	96%	100%	90%	100%	90%	31/12/2015	
Somalia	119	87	80	5	27	112	7	34	1	0	1	33	12.9	0.1	76%	96%	85%	100%	68%	29/12/2015	B3
Sudan	6824	4502	1416	2145	24	3585	3239	4502	902	148	1050	3450	87.1	5.3	99%	100%	85%	99%	74%	31/12/2015	B3; D9
Syria	678	678	45	0	0	45	633	644	0	0	0	644	2.0	2.8	100%	99%	66%	97%	95%	28/12/2015	
Tunisia	238	210	11	0	5	16	222	220	23	0	23	195	1.5	1.9	88%	69%	64%	100%	92%	30/12/2015	
UAE	1004	897	250	5	82	337	667	654	167	8	175	476	40.8	6.0	91%	75%	60%	100%	54%	31/12/2015	B3, D8
Yemen	2417	2010	89	284	95	468	1949	2010	78	0	78	1848	16.8	6.7	94%	99%	75%	100%	91%	31/12/2015	B3

"Individual equivocal cases of measles and rubella added in total cases are described in the following pages.  
 Definition of importation :Case exposed outside 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/non-Rubella 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.

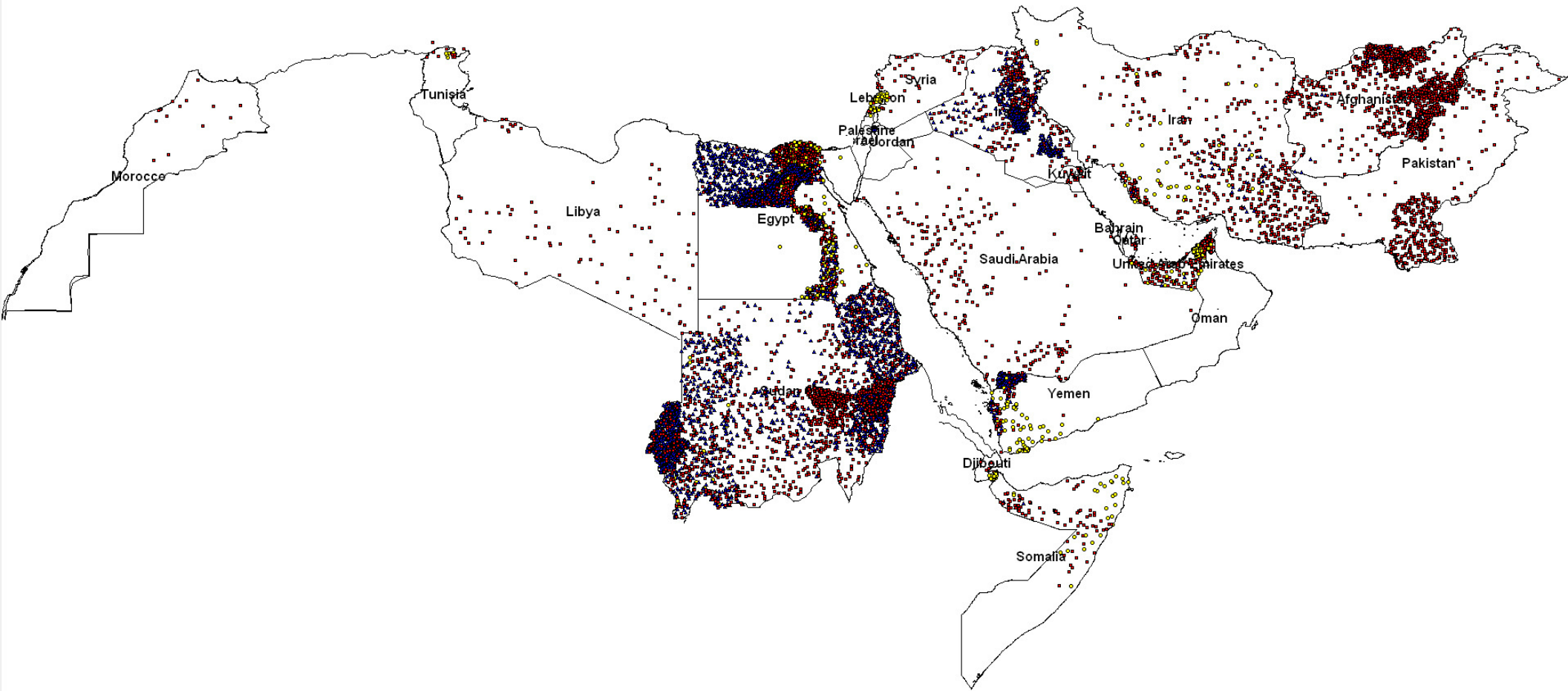
**Djibouti reported only Measles data of outbreak in February 2015**

# Measles case finding and distribution by Month

Between 01/01/2015 and 31/12/2015

Country	Total Suspected cases for measles	Measles specimens tested	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
Afghanista	2017	1973	1154	1	0	37	0	1191	89	160	269	204	208	116	65	28	16	7	8	21
Bahrain	365	365	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Djibouti	33	14	11	0	0	1	18	30	4	26	0	0	0	0	0	0	0	0	0	0
Iran	6552	6186	563	34	123	37	46	646	34	49	96	122	198	55	33	19	17	12	6	5
Iraq	1949	1474	1011	0	0	444	0	1455	137	222	253	264	274	122	95	38	19	18	7	6
Jordan	91	91	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egypt	7291	5381	3521	0	15	1601	309	5431	587	597	879	969	894	550	362	228	142	118	80	25
Kuwait	251	244	18	0	1	0	0	18	2	0	1	5	3	1	4	1	0	0	0	1
Lebanon	92	53	6	3	0	0	33	39	1	3	6	5	3	5	4	1	2	1	5	3
Libya	102	102	87	6	0	0	0	87	45	22	12	6	0	2	0	0	0	0	0	0
Morocco	327	323	17	9	0	0	0	17	1	0	1	2	4	3	3	0	1	1	1	0
Oman	1468	1445	0	27	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pakistan	1394	1394	337	0	0	0	0	337	21	33	26	33	18	45	27	23	15	25	43	28
Palestine	186	186	0	2	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Qatar	337	327	18	24	2	0	0	18	2	0	2	6	0	0	0	0	2	0	2	4
Saudi Arabi	1100	1056	219	0	4	0	0	219	21	6	4	38	55	52	17	15	3	5	3	0
Somalia	119	87	80	0	0	5	27	112	12	17	32	5	11	2	0	1	0	24	5	3
Sudan	6824	4502	1416	0	0	2145	24	3585	387	446	1110	555	213	209	220	151	113	76	71	34
Syria	678	678	45	17	43	0	0	45	1	1	4	10	19	3	0	3	0	4	0	0
Tunisia	238	210	11	0	0	0	5	16	3	1	2	1	2	1	0	0	2	0	2	2
UAE	1004	897	250	0	0	5	82	337	31	42	51	31	31	32	11	6	14	29	39	20
Yemen	2417	2010	89	24	0	284	95	468	55	134	164	27	9	5	6	5	10	23	21	9
<b>Grand Total</b>	<b>34835</b>	<b>28998</b>	<b>8853</b>	<b>151</b>	<b>243</b>	<b>4559</b>	<b>639</b>	<b>14051</b>	<b>1433</b>	<b>1759</b>	<b>2912</b>	<b>2283</b>	<b>1942</b>	<b>1203</b>	<b>847</b>	<b>519</b>	<b>356</b>	<b>343</b>	<b>293</b>	<b>161</b>

# Cumulative geographic distribution of Measles cases in the EMR countries December 2015



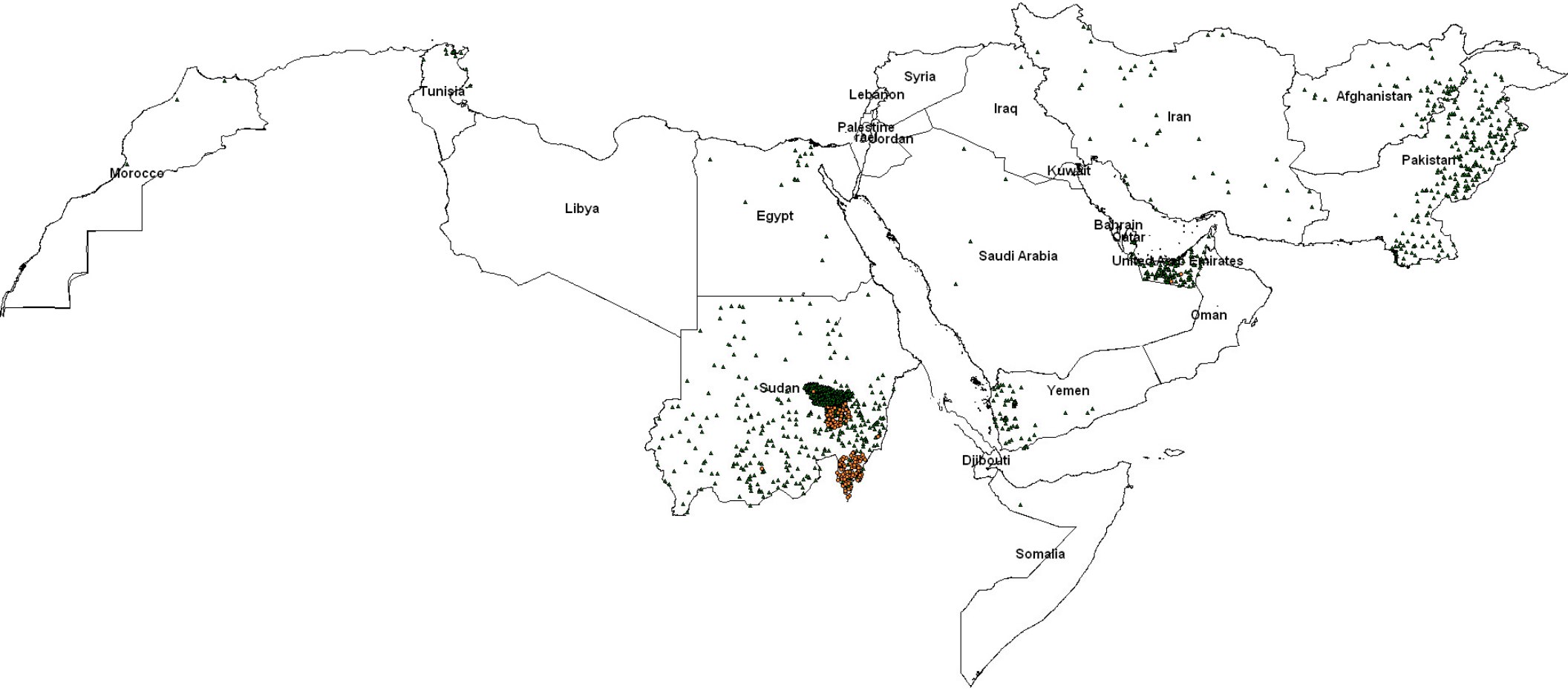
■ Measles Lab confirmed	N=8853
▲ Measles Epi Linked	N=4559
● Measles Clinically compatible	N=639

# Rubella case finding and distribution by Month

Between 01/01/2015 and 31/12/2015

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	2017	816	60	0	0	0	60	6	12	8	8	8	4	2	1	1	3	1	6
Bahrain	365	365	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Djibouti	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iran	6552	6171	45	4	123	0	45	1	7	1	6	10	6	4	2	3	2	2	1
Iraq	1949	1458	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0
Jordan	91	91	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egypt	7291	5356	53	0	15	0	53	10	11	13	4	4	2	1	0	1	1	4	2
Kuwait	251	224	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lebanon	92	25	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Libya	102	102	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Morocco	327	302	6	11	0	0	6	0	0	1	0	0	2	1	0	0	1	0	1
Oman	1468	1445	0	11	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pakistan	1394	1394	226	0	0	0	226	2	11	20	31	18	94	31	2	0	5	4	8
Palestine	186	180	0	5	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Qatar	337	274	7	17	2	0	7	1	2	0	3	0	0	0	0	0	1	0	0
Saudi Arabia	1100	1022	4	0	4	0	4	0	0	1	0	1	2	0	0	0	0	0	0
Somalia	119	34	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
Sudan	6824	4502	902	1	0	148	1050	179	272	178	111	41	30	20	48	45	42	35	49
Syria	678	644	0	9	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tunisia	238	220	23	0	0	0	23	0	0	1	4	2	3	2	2	0	3	1	5
UAE	1004	654	167	0	0	8	175	8	8	16	28	23	13	14	3	0	3	36	23
Yemen	2417	2010	78	59	0	1	79	13	13	6	3	3	10	10	8	2	5	4	1
<b>Grand Total</b>	<b>34835</b>	<b>27289</b>	<b>1573</b>	<b>120</b>	<b>243</b>	<b>157</b>	<b>1730</b>	<b>220</b>	<b>336</b>	<b>246</b>	<b>198</b>	<b>111</b>	<b>166</b>	<b>85</b>	<b>66</b>	<b>52</b>	<b>66</b>	<b>87</b>	<b>96</b>

# Cumulative geographic distribution of Rubella cases in the EMR countries December 2015



▲ Rubella Lab confirmed N=1573  
● Rubella Epi Linked N=157