

## EMR cumulative indigenous Measles/Rubella cases counts and surveillance indicators

Between 01/01/2021 and 31/12/2021

Country	Measles case finding report							Rubella case finding report					Measles incidence/1000,000 *	Reporting rate ***	Indicators: target ≥80%					Last date reported	Genotypes reorted	
	Total suspected cases for M/R	Specimens tested for Measles	Measles lab confirmed	Measles Epi-Linked	Measles clinically compatible	Total Measles	Measles discarded cases	Specimens tested for Rubella	Rubella lab confirmed	Rubella Epi-Linked	Rubella clinically compatible	Total Rubella			Rubella discarded	suspects tested for Measles ****	cases with complete investigation	specimens received at the lab within 5 days	specimens with adequate condition			results reported back within 4 days
Afghanistan	4112	4052	2890	1	71	2962	1150	4052	48	0	0	48	4004	74.36	2.89	99%	75%	89%	99%	67%	31-12-2021	
Bahrain	156	156	0	0	0	0	156	156	0	0	0	0	156	0.00	8.92	100%	100%	100%	100%	100%	31-12-2021	
<b>Djibouti</b>	NR*	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
Iran	4154	4071	103	0	3	106	4048	4071	39	0	0	39	4032	1.25	4.76	98%	84%	96%	100%	66%	31-12-2021	
Iraq	186	165	8	0	13	21	165	165	7	0	0	7	158	0.51	0.40	89%	36%	13%	100%	41%	31-12-2021	
Jordan	31	29	2	0	0	2	29	29	0	0	0	0	29	0.19	0.28	97%	13%	79%	100%		31-12-2021	
Egypt	2335	2335	0	0	0	0	2335	2335	0	0	0	0	2335	0.00	2.24	98%	11%	96%	100%	86%	31-12-2021	
Kuwait	50	46	3	0	0	3	47	46	1	0	0	1	45	0.69	1.09	92%	64%	51%	100%	16%	31-12-2021	
Lebanon	5	5	0	0	5	5	0	5	0	0	0	0	5	0.74	0.00	100%	100%	100%	100%	75%	31-03-2021	
Libya	120	119	14	0	0	14	106	119	12	0	0	12	107	2.01	1.57	97%	64%	19%	100%	79%	31-12-2021	
Morocco	54	49	1	0	0	1	53	49	1	0	0	1	48	0.03	0.14	90%	62%	66%	100%	78%	31-12-2021	
Oman	298	293	0	0	0	0	298	293	0	0	0	0	293	0.00	5.71	98%	83%	92%	100%	89%	31-12-2021	B3 imp.
Pakistan	17150	11685	5875	210	965	7050	10100	11685	98	0	0	98	11587	31.31	4.48	64%	65%	80%	89%	64%	31-12-2021	
Palestine	25	25	0	0	0	0	25	25	0	0	0	0	25	0.00	0.48	100%	58%	46%	100%	83%	30-11-2021	
Qatar	55	55	0	0	0	0	55	55	1	0	0	1	54	0.00	1.88	100%	56%	98%	100%	85%	31-12-2021	
Saudi Arabia	515	512	81	10	0	91	424	512	20	0	0	20	492	2.54	1.20	100%	71%	100%	100%	99%	30-09-2021	
<b>Somalia ★</b>	7494	1271	973	0	0	973	6521	1271	1	1	0	2	1269	59.48	39.86	89%	100%	89%	100%	16%	31-12-2021	
Sudan	1473	1071	425	254	0	679	794	1071	208	95	0	303	768	15.12	1.77	100%	98%	70%	100%	11%	30-11-2021	
Syria	661	661	11	0	0	11	650	661	7	0	0	7	654	0.60	3.56	90%	100%	58%	100%	99%	31-12-2021	
Tunisia	81	79	1	0	0	1	80	79	5	0	0	5	74	0.08	0.67	90%	91%	15%	100%	89%	31-12-2021	
UAE	140	127	23	0	12	35	105	127	1	0	1	2	125	3.50	1.05	91%	83%	98%	100%	83%	31-12-2021	
Yemen	8246	4420	1578	522	2239	4339	3907	4420	746	220	1491	2457	1963	142.31	12.81	54%		45%	99%	79%	31-10-2021	
<b>Total</b>	<b>47341</b>	<b>31226</b>	<b>11988</b>	<b>997</b>	<b>3308</b>	<b>16293</b>	<b>31048</b>	<b>31226</b>	<b>1195</b>	<b>316</b>	<b>1492</b>	<b>3003</b>	<b>28223</b>	<b>9.62</b>	<b>4.79</b>	<b>100%</b>	<b>66%</b>	<b>71%</b>	<b>99%</b>	<b>69%</b>		

\*The sum of the measles lab confirmed cases +measles epi-linked cases + measles clinically compatible cases/million population

\*\*The sum of the rubella lab confirmed cases +rubella epi-linked cases + rubella clinically compatible cases/million population

\*\*\*Reporting rate of discarded non-measles non-rubella cases at the national level per 100,000 total population

\*\*\*\*Excluding measles and rubella epi-linked cases

\*NR- Not reported

Green cells= indicator met. Yellow cells=indicator not met. Red cells=missing data for calculating indicator.

Adequate investigation includes the following data elements:  
 -District. -Age. -Gender.  
 -Date of rash onset, case notification and investigation  
 -Vaccination status. -Date of last vaccination with MCV  
 -Date specimen collected.  
 -Travel history

**Countries that did not report**

★ **Somalia reported aggregate data**

## Measles final classification and distribution by Month

Between 01/01/2021 and 31/12/2021

Country	Total Suspected cases for measles	Total specimens tested	Imported Measles cases*	Measles import related*	Vaccine related***	Unknown source	Measles Lab confirmed	Measles Epi-Linked	Measles clinically compatible	Total confirmed cases#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Afghanistan	4112	4052	0	0	0	0	2890	1	71	2962	143	314	403	548	357	228	140	117	102	112	221	264
Bahrain	156	156	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Djibouti</b>	<b>NR*</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>
Iran	4154	4071	54	34	229	7	103	0	3	106	0	0	0	17	22	30	9	10	2	10	2	4
Iraq	186	165	0	0	1	0	8	0	13	21	6	0	3	1	0	2	0	0	0	1	5	3
Jordan	31	29	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0
Egypt	2335	2335	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kuwait	50	46	0	0	0	0	3	0	0	3	0	1	0	0	1	0	0	0	0	1	0	0
Lebanon	5	5	0	0	0	0	0	0	5	5	1	2	2	0	0	NR	NR	NR	NR	NR	NR	NR
Libya	120	119	0	0	0	0	14	0	0	14	0	9	1	1	3	0	0	0	0	0	0	0
Morocco	54	49	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
Oman	298	293	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pakistan	17150	11685	0	0	0	0	5875	210	965	7050	686	979	1195	1501	763	986	287	72	43	75	202	360
Palestine	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NR
Qatar	55	55	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	515	512	0	0	0	0	81	10	0	91	0	0	2	0	3	6	1	1	78	NR	NR	NR
Somalia	7494	1271	0	0	0	0	973	0	0	973	84	102	45	82	26	21	167	67	62	98	128	62
Sudan	1473	1071	0	0	6	0	425	254	0	679	4	8	8	27	93	135	141	108	89	49	17	NR
Syria	661	661	0	0	17	0	11	0	0	11	2	2	1	3	0	0	0	2	0	0	1	0
Tunisia	81	79	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
UAE	140	127	0	0	4	0	23	0	12	35	1	3	1	4	5	1	1	2	5	7	1	4
Yemen	8246	4420	0	0	0	0	1578	522	2239	4339	550	600	953	472	344	479	303	368	235	35	NR	NR
<b>Total</b>	<b>47341</b>	<b>31226</b>	<b>55</b>	<b>34</b>	<b>274</b>	<b>7</b>	<b>11988</b>	<b>997</b>	<b>3308</b>	<b>16293</b>	<b>1477</b>	<b>2021</b>	<b>2615</b>	<b>2656</b>	<b>1617</b>	<b>1888</b>	<b>1049</b>	<b>747</b>	<b>616</b>	<b>390</b>	<b>577</b>	<b>697</b>

\* Imported measles/rubella case – a case exposed to measles outside the country during the 7-21 days prior to rash onset and supported by epidemiological or virological evidence (for rubella the exposure would be during the 12-23 days prior to rash onset)

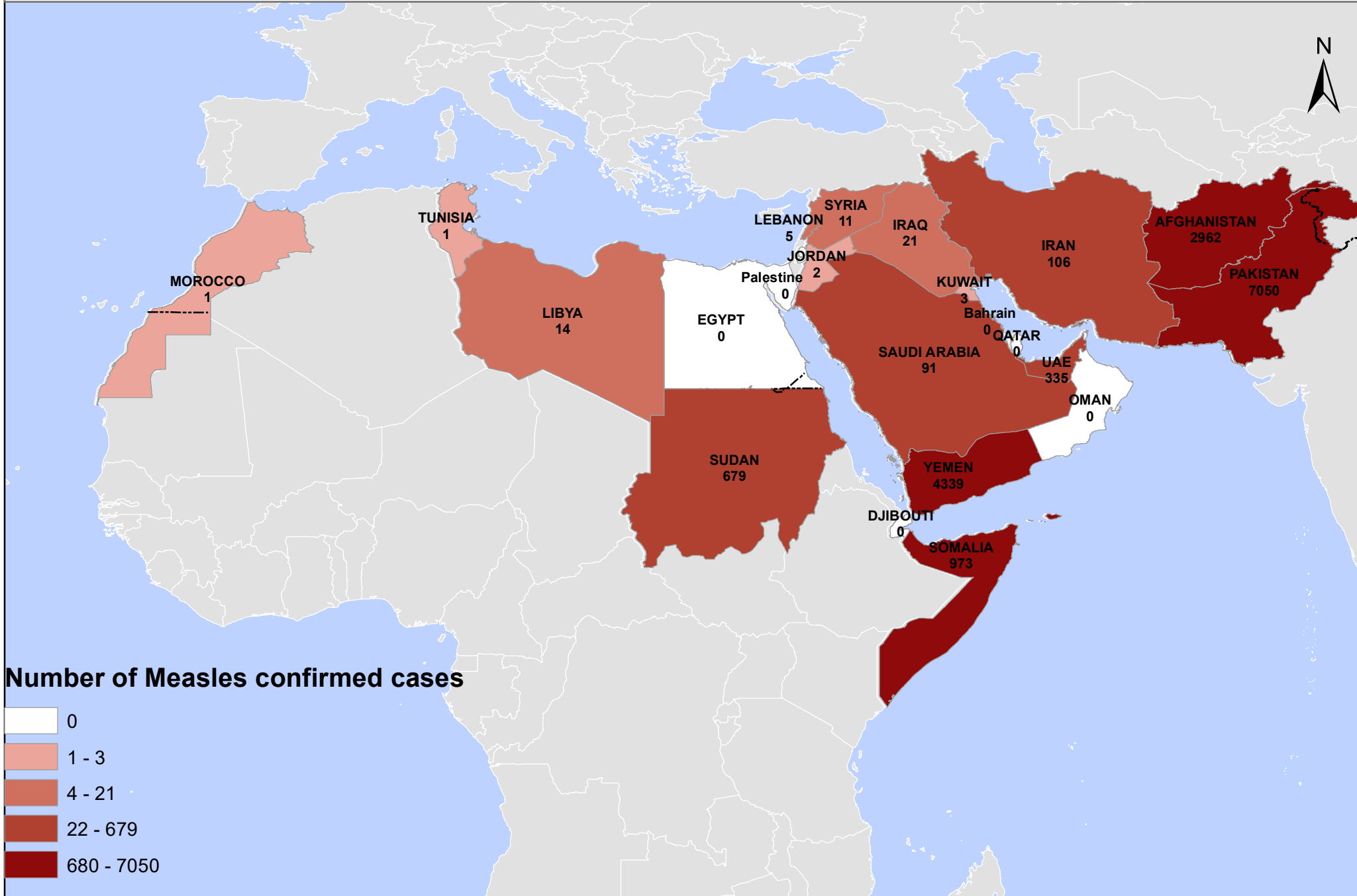
\*\* Importation related measles/rubella case – a locally acquired infection occurring as part of a chain of transmission originating from an imported case as supported by epidemiological or virological evidence

\*\*\*Vaccine related case – a suspect case that has a rash like illness without respiratory symptoms and the rash had onset 7-14 days following vaccination and the lab detected IgM in the blood specimen that was collected 8-56 days after vaccination and there were no secondary cases identified. OR any suspect case from which virus is isolated and genotyping test reveals the virus to be a vaccine strain

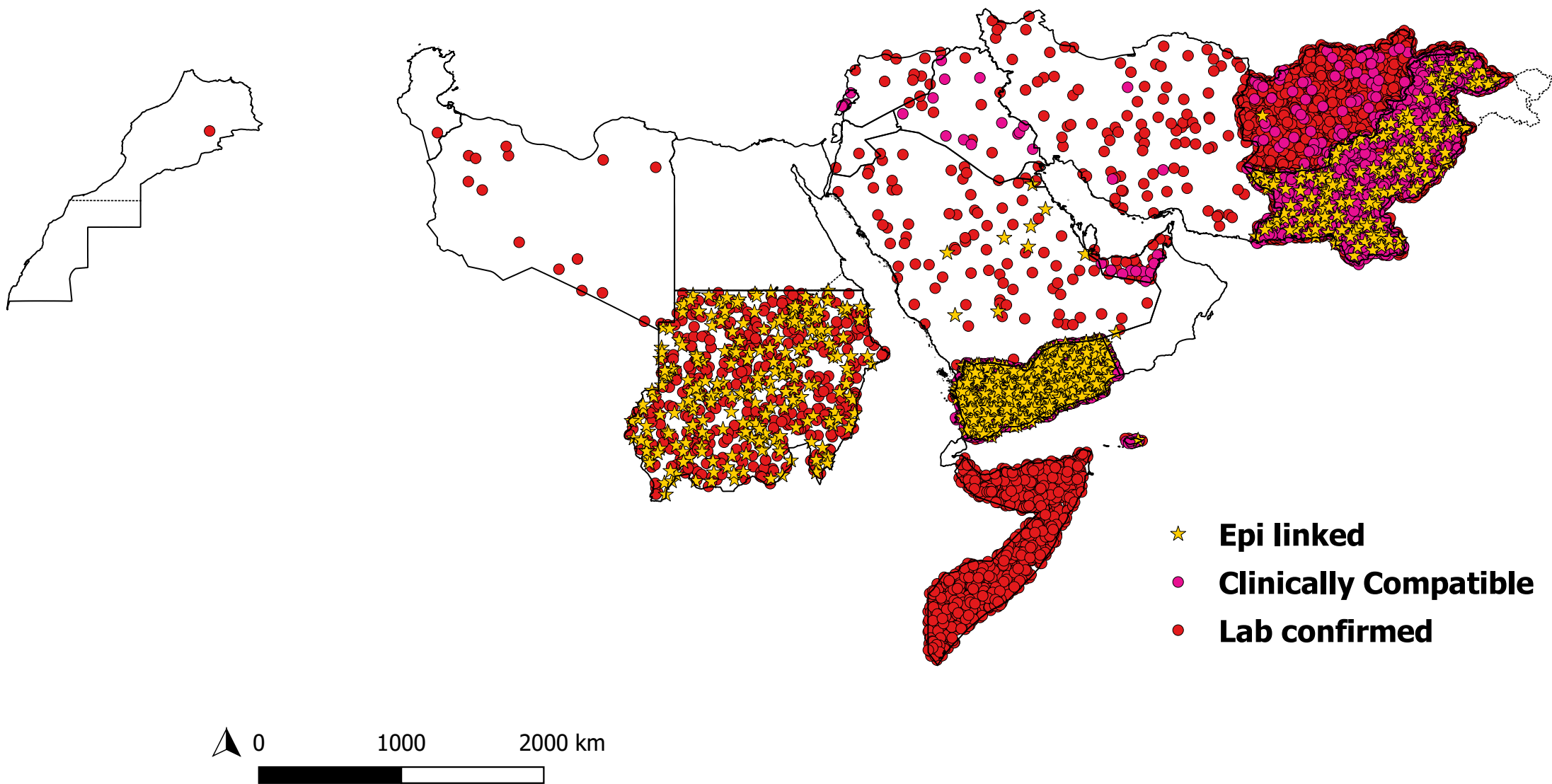
# Total confirmed cases; include all cases confirmed by laboratory testing or epi linkage, plus those clinical cases that were reported without a laboratory specimen or epi linkage

\*NR- Not reported to date

# Total Measles confirmed cases up to December 31, 2021



# Cumulative geographic Distribution of Measles cases in the EMR countries Up to December 31, 2021



Remark: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or area of its frontier or boundaries. Dotted dashed lines on the maps represent approximate border lines for which there may not yet be full agreement.

## Rubella final classification and distribution by Month

Between 01/01/2021 and 31/12/2021

Country	Total Suspected cases for Rubella	Total specimens tested	Imported Rubella cases*	Rubella import related*	Vaccine related***	Unknown source	Rubella Lab confirmed	Rubella Epi-Linked	Rubella clinically compatible	Total confirmed cases#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Afghanistan	4112	4052	0	0	0	0	48	0	0	48	2	3	7	9	14	0	0	2	0	2	4	5
Bahrain	156	156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Djibouti</b>	<b>NR*</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>
Iran	4154	4071	11	1	75	7	39	0	0	39	0	0	0	3	9	8	4	0	1	9	0	5
Iraq	186	165	0	0	0	0	7	0	0	7	2	0	0	0	0	0	0	0	1	0	3	1
Jordan	31	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egypt	2335	2335	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kuwait	50	46	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0
Lebanon	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	NR	NR	NR	NR	NR	NR	NR
Libya	120	119	0	0	0	0	12	0	0	12	1	4	1	2	0	1	1	0	0	1	1	0
Morocco	54	49	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
Oman	298	293	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pakistan	17150	11685	0	0	0	0	98	0	0	98	0	0	0	18	7	6	3	3	7	0	6	48
Palestine	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NR
Qatar	55	55	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
Saudi Arabia	515	512	0	0	0	0	20	0	0	20	2	0	1	1	1	2	2	3	8	NR	NR	NR
Somalia	7494	1271	0	0	0	0	1	1	0	2	0	0	0	0	0	2	0	0	0	0	0	0
Sudan	1473	1071	0	0	0	0	208	95	0	303	8	11	19	68	81	52	17	20	18	9	0	NR
Syria	661	661	0	0	0	0	7	0	0	7	0	0	0	1	1	1	1	2	1	0	0	0
Tunisia	81	79	0	0	0	0	5	0	0	5	2	0	0	0	0	0	0	1	0	1	1	0
UAE	140	127	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	2	0	0
Yemen	8246	4420	0	0	0	0	746	220	1491	2457	375	502	511	201	124	208	131	184	214	7	NR	NR
<b>Total</b>	<b>47341</b>	<b>31226</b>	<b>11</b>	<b>1</b>	<b>75</b>	<b>7</b>	<b>1195</b>	<b>316</b>	<b>1492</b>	<b>3003</b>	<b>392</b>	<b>520</b>	<b>539</b>	<b>304</b>	<b>238</b>	<b>281</b>	<b>159</b>	<b>215</b>	<b>250</b>	<b>31</b>	<b>15</b>	<b>59</b>

\* Imported measles/rubella case – a case exposed to measles outside the country during the 7-21 days prior to rash onset and supported by epidemiological or virological evidence (for rubella the exposure would be during the 12-23 days prior to rash onset)

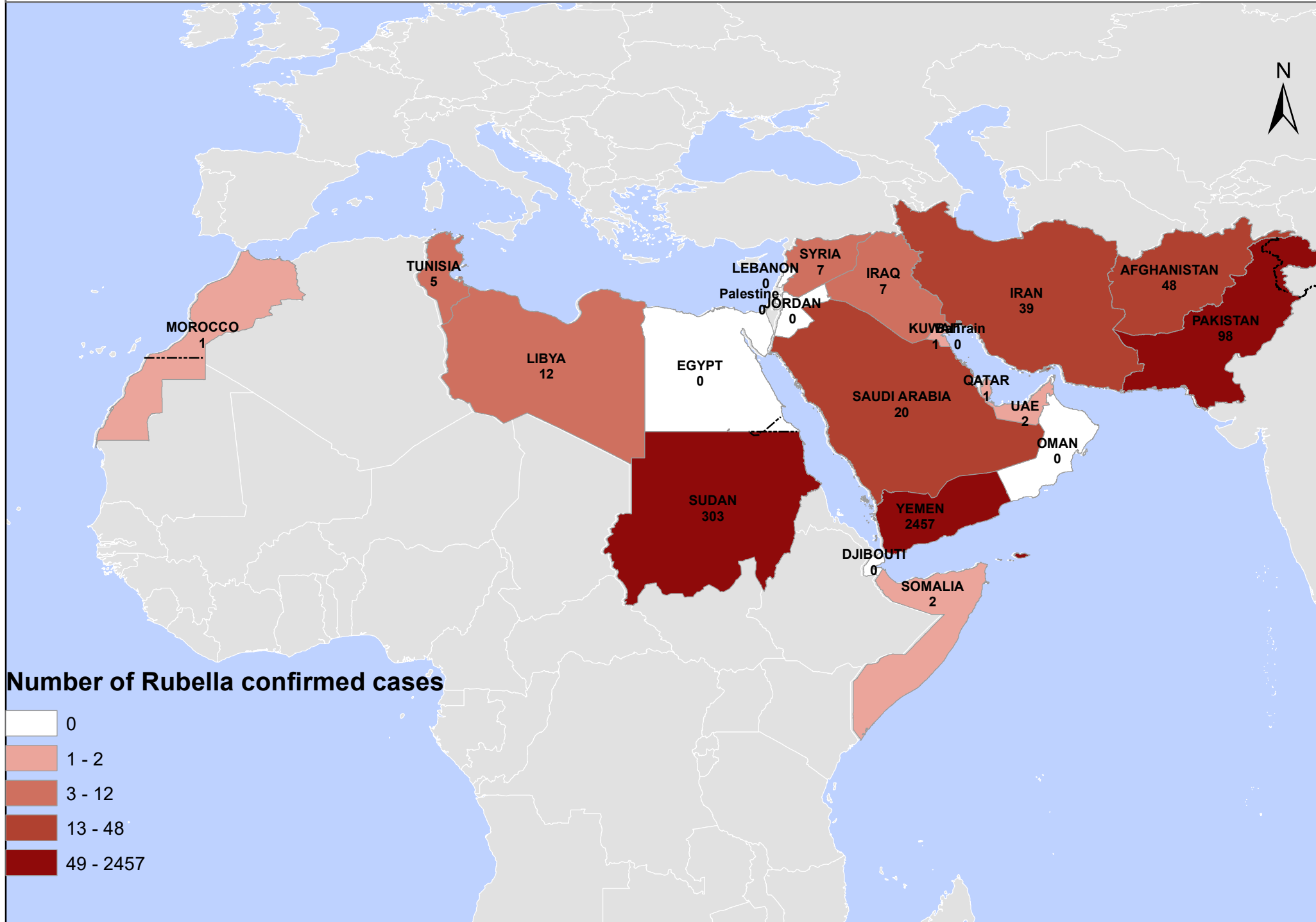
\*\* Importation related measles/rubella case – a locally acquired infection occurring as part of a chain of transmission originating from an imported case as supported by epidemiological or virological evidence

\*\*\*Vaccine related case – a suspect case that has a rash like illness without respiratory symptoms and the rash had onset 7-14 days following vaccination and the lab detected IgM in the blood specimen that was collected 8-56 days after vaccination and there were no secondary cases identified. OR any suspect case from which virus is isolated and genotyping test reveals the virus to be a vaccine strain

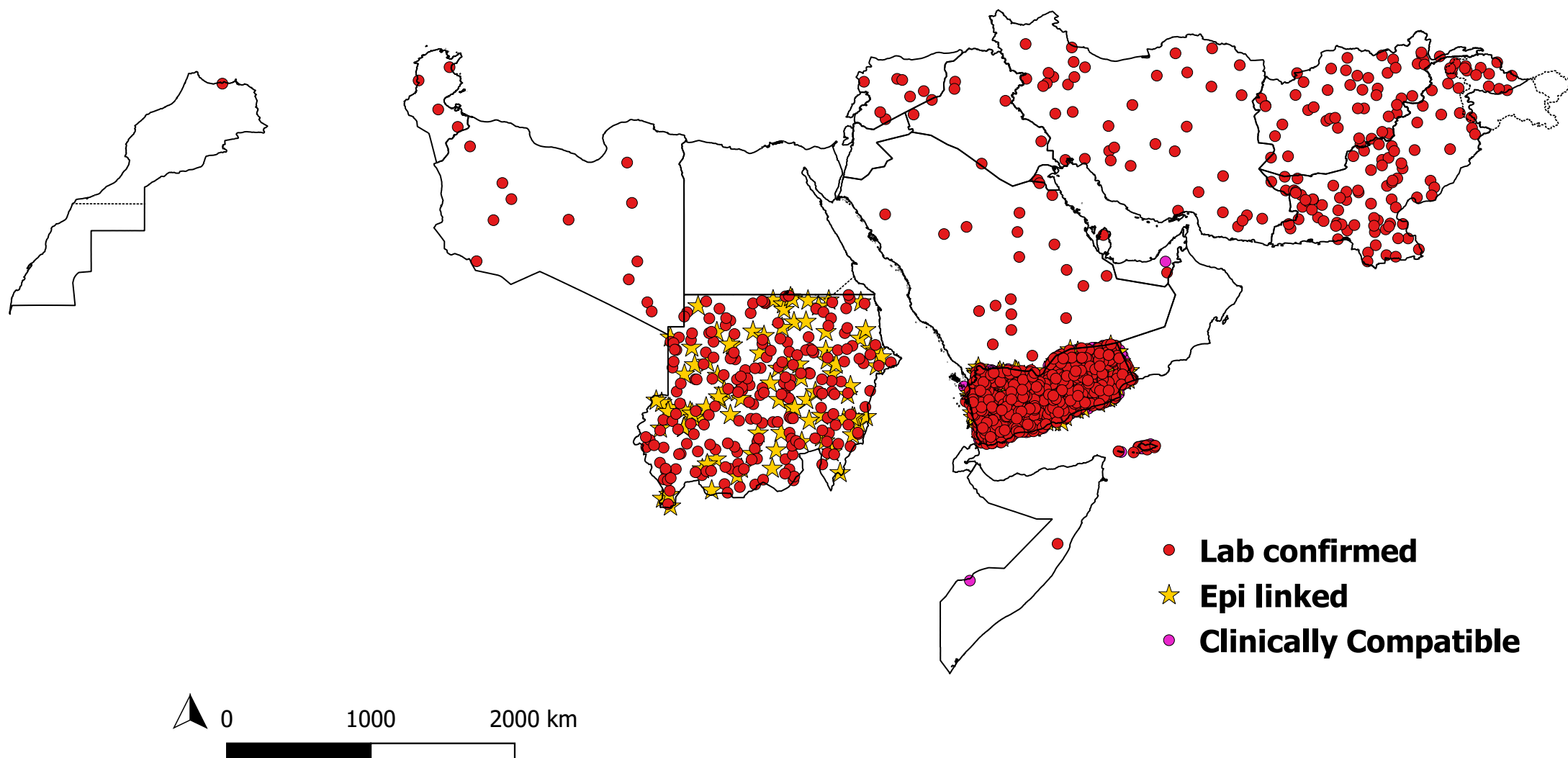
# Total confirmed cases; include all cases confirmed by laboratory testing or epi linkage, plus those clinical cases that were reported without a laboratory specimen or epi linkage

\*NR- Not reported to date

# Total Rubella confirmed cases up to December 31, 2021



# Cumulative geographic Distribution of Rubella cases in the EMR countries Up to December 31, 2021



Remark: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or area of its frontier or boundaries. Dotted dashed lines on the maps represent approximate border lines for which there may not yet be full agreement.

## Measles and Rubella laboratory summary report

Between 01-Jan-21 and 31-Dec-21

Country	Measles							
	specimens tested	%	Positive	%	Negative	%	Equivocal	%
Afghanistan	4052	99%	2835	70%	1196	30%	21	0.5%
Bahrain	156	100%	0	0%	156	100%	0	0.0%
Iran	4071	98%	256	6%	3815	94%	0	0.0%
Iraq	165	100%	9	5%	154	93%	2	1.2%
Jordan	29	100%	2	7%	27	93%	0	0.0%
Egypt	2335	99%	43	2%	2285	98%	7	0.3%
Kuwait	46	100%	3	7%	43	93%	0	0.0%
Lebanon	5	100%	5	100%	0	0%	0	0.0%
Libya	119	100%	14	12%	102	86%	3	2.5%
Morocco	49	100%	1	2%	47	96%	1	2.0%
Oman	293	99%	14	5%	273	93%	6	2.0%
Pakistan	11685	92%	4720	40%	6965	60%	0	0.0%
Palestine	25	100%	0	0%	25	100%	0	0.0%
Qatar	55	100%	4	7%	51	93%	0	0.0%
Saudi Arabia	512	100%	75	15%	437	85%	0	0.0%
Somalia	1271	100%	973	77%	297	23%	1	0.1%
Sudan	1071	83%	679	63%	373	35%	19	1.8%
Syria	661	100%	12	2%	647	98%	2	0.3%
Tunisia	79	96%	2	3%	77	97%	0	0.0%
UAE	127	100%	27	21%	98	77%	2	1.6%
Yemen	4420	100%	1581	36%	2780	63%	59	1.3%

Rubella							
specimens tested	%	Positive	%	Negative	%	Equivocal	%
4052	100%	47	1%	4004	99%	1	0%
156	100%	0	0%	155	99%	1	1%
4071	98%	141	3%	3930	97%	0	0%
165	100%	5	3%	159	96%	1	1%
29	100%	7	24%	21	72%	1	3%
2335	99%	50	2%	2282	98%	3	0%
46	100%	1	2%	45	98%	0	0%
5	100%	0	0%	5	100%	0	0%
119	100%	12	10%	99	83%	8	7%
49	100%	1	2%	43	88%	5	10%
293	99%	11	4%	281	96%	1	0%
11685	92%	140	1%	11545	99%	0	0%
25	100%	0	0%	25	100%	0	0%
55	100%	1	2%	54	98%	0	0%
512	100%	18	4%	494	96%	0	0%
1271	100%	2	0%	1269	100%	0	0%
1071	83%	303	28%	710	66%	58	5%
661	98%	19	3%	632	96%	10	2%
79	96%	6	8%	73	92%	0	0%
127	100%	1	1%	125	98%	1	1%
4420	100%	726	16%	3252	74%	442	10%



# EMR MR elimination status up to December 31, 2021

