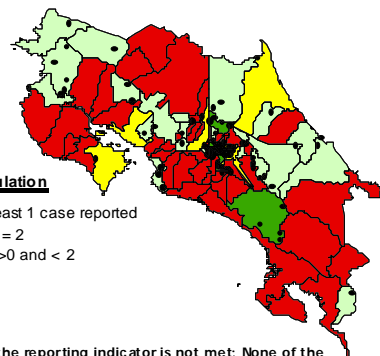




Reported Suspect Measles/Rubella Cases and Reporting Rate per 100,000 Population by Canton, Costa Rica, 2007



Reporting rate per 100,000 population

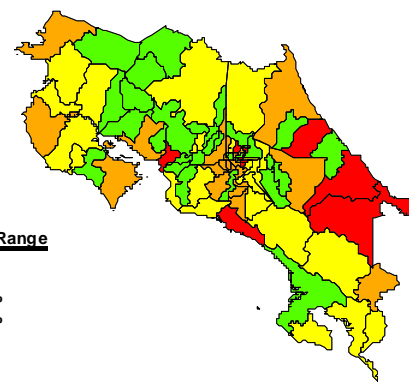
- <100,000 population and at least 1 case reported
- =100,000 population and rate = 2
- =100,000 population and rate >0 and < 2
- 0 case reported

1 dot = 1 suspect case reported

Note: Yellow and red indicate that the reporting indicator is not met; None of the 84 suspect measles/rubella cases reported in 2007 was confirmed.

Source: Ministry of Health, Costa Rica

Reported MMR Coverage Rates for Children Aged 1 Year Costa Rica, 2007



Coverage Range

- <80%
- 80-89%
- 90-94%
- =95%

Source: Ministry of Health, Costa Rica

In the context of measles, rubella, and congenital rubella syndrome (CRS) elimination in the Americas, geographic information systems (GIS) provide a useful tool for data analysis, locating municipalities at-risk due to their epidemiological silence, low coverage, or both. In the example, 2007 Costa Rica data are displayed by canton (municipality). Costa Rica was the first country to sign a decree establishing a national commission for the documentation of measles, rubella, and CRS elimination, and served as the pilot country to evaluate the regional elimination protocol.

Table No.1
Classification of Suspect Measles, Rubella, and Congenital Rubella Syndrome (CRS) Cases for the Period of Weeks 01-32, 2008

Subregion and Country	Suspect Cases 2008	Measles Confirmed 2008			Year/Week Last Confr. Measles Case	Rubella Confirmed 2008			Year/Week Last Confr. Rubella Case	Diagnosis of Discarded Cases 2008		Congenital Rubella Syndrome		CRI *	
		Clinic.	Lab.	Total		Clinic.	Lab.	Total		Dengue	Other	Suspect	Conf.		
AND	BOL	164	0	0	0	00/40	0	0	0	06/03	0	157	2
	COL	517	0	0	0	02/39	0	0	0	07/31	5	499	33	0	
	ECU	332	0	1	1 ^b	08/21	0	0	0	04/45	17	312	2	0	
	PER	737	0	1	1 ^b	08/18	0	0	0	06/45	0	670	...	...
	VEN	75	0	0	0	07/06	0	0	0	07/34	16	59	...	...
BRA	BRA	12260	0	0	0	06/48	50	869	919	08/31	427	9236	29	3	
	CAP	9	0	0	0	05/22	0	0	0	01/42	1	1	...	...
CAR	ELS	82	0	0	0	01/19	0	0	0	06/43	5	77	...	...
	GUT	208	0	0	0	98/05	0	0	0	06/30	2	196	0	0	
	HON	107	0	0	0	97/29	0	0	0	04/11	17	88	17	0	
	NIC	72	0	0	0	94/14	0	0	0	04/19	0	67	0	...	
	PAN	74	0	0	0	95/49	0	0	0	02/48	1	73	0	0	
	LAC	287	0	2	2 ^b	08/26	0	1	1	08/18	0	276	0	0	
	CUB	508	0	0	0	93/27	0	0	0	04/06	0	494	0	0	
	DOR	27	0	0	0	01/23	0	0	0	06/44	0	4	...	...
	FGU	9	0	0	0	...	0	0	0	...	0	8	...	...
	GUA
MEX	HAI	6	0	0	0	01/39	0	0	0	06/47	0	5	1	0	
	MAR	...	...	...	...	...	...	...	...	...	...	...	...	...
	PUR	...	...	...	...	...	...	...	...	...	...	...	...	...
	MEX	3690	0	0	0	06/49	0	19	19	08/29	0	2887	0	0	
NOA	CAN	...	0	51	51 ^b	08/28	0	0	0	07/15	...	...	...	...
	USA	...	0	131	131 ^{a,b}	08/26	0	9	9	08/32	...	...	...	...
SOC	ARG	780	0	0	0	00/11	0	386	386	08/32	0	269	9	...	
	CHI	180	0	0	0	03/19	...	...	15	08/09	0	144	116	1
	PAR	156	0	0	0	98/44	0	0	0	05/21	3	152	0	0	
	URU	4	0	0	0	99/08	0	0	0	01/37	0	4	...	...
TOTAL		20284	0	186	186	-	50	1284	1349	-	494	15678	207	4	2

... No report received; * Congenital rubella infection; (a) Provisional data; (b) See Table 2 for infection source.



Measles / Rubella Surveillance

Table No.2
Infection Source of Measles and Rubella Confirmed
Cases for the Period of Weeks 01-32, 2008

Subregion and Country		Measles			Rubella			
		I	IR	U	I	IR	U	IN
AND	BOL							
	COL							
	ECU	1						
	PER	1						
	VEN							
BRA	BRA							919
	CAP							
	COR							
	ELS							
	GUT							
CAR	HON							
	NIC							
	PAN							
	CAR	1	1		1			
	CUB							
LAC	DOR							
	FGU							
	GUA							
	HAI							
	MAR							
MEX	PUR							
	MEX						19	
NOA	CAN	5	42	4				
	USA	14	54	17				
SOC	ARG							
	CHI					2	13	
	PAR							
	URU							
TOTAL		22	97	21	1	2	32	919

Table No.3
Measles/Rubella Suspect Cases Under Investigation
for the Period of Weeks 01-32, 2008

Country	Pending Cases 2007	Cumulative 2008	Week of Rash Onset							Unkn.
			01-27	28	29	30	31	32		
BOL	0	7	2	2	3	0	...	...
COL	0	13	11	1	0	1	0	0	0	
ECU	0	2	2	0	0	0	0	0	0	
PER	0	67	48	4	6	2	3	4		
VEN	0	0	0	0	0	0	...	...
BRA	260	1678	1348	91	84	86	69	...		
COR	2	7	7	0	0	0	...	...
ELS	0	0	0	0	0	0	0	0		
GUT	0	10	10	0	0	0	...	...
HON	0	2	1	1	0	0	0	0		
NIC	0	5	5	0	0	0	0	0		
PAN	0	0	0	0	0	0	0	...		
CAR	0	8	7	0	0	0	...	...	1
CUB	0	14	0	0	0	0	0	14		
DOR	0	23	23	0	0	0	0	0		
FGU	0	0	0	0	0	...	...	...
GUA	...	...	...	...	...	...	...	...
HAI	0	1	1	0	0	0	0	0		
MAR	...	...	...	...	...	...	...	...
PUR	...	...	...	...	...	...	...	...
MEX	0	784	706	21	30	18	9	0		
CAN	...	...	...	...	...	...	...	...
USA	...	...	...	...	...	...	...	...
ARG	0	125	31	12	20	27	30	5		
CHI	0	25	16	1	2	4	2	...		
PAR	0	1	0	0	0	1	0	0		
URU	0	0	0	0	0	0	...	...
TOTAL	262	2772	2218	133	145	139	113	23	1	

I: Imported; IR: Import-related; U: Unknown; IN: Indigenous

... No report received

Table No.4
Indicators of Integrated Measles/Rubella Surveillance for the Period of Weeks 01-32, 2008

Sub-region and Country		% Sites Reporting Weekly	% Cases with Adequate Investigation	% Cases with Adequate Sample	% Lab Received ≤5 days	% Lab Result ≤4 days	% Cases Discarded by Lab	Chains of Transmission With Representative Samples for Viral Isolation	
								Measles	Rubella
AND	BOL	77	100	100	82	63	100		
	COL	80	66	98	79	90	98		
	ECU	70	49	98	89	85	100		
	PER	...	92	98	80	46	94		
	VEN	89	98	98	92	67	100		
BRA	BRA	79	54 ^a	63	...	...	98		
	CAP	...	78	100	89	33	100		
	COR	...	57	99	95	94	98		
	ELS	91	80	99	79	87	95		
	GUT	...	96	98	69	92	96		
CAR	HON	95	80	92	83	89	99		
	NIC	100	77	100	74	93	99		
	PAN	93	73	96	55	98	99		
	CAR	99	100 ^a	100	90	100	97		
	CUB	100	42	62	44	31	100		
LAC	DOR	79	...	...	...	...	...
	FGU	...	...	...	...	...	...
	GUA	...	...	...	...	...	...
	HAI	83	83	100	0	0	100		
	MAR	...	...	...	...	...	...
MEX	PUR	...	...	...	...	...	...
	MEX	89	98	98	73	81	100		
NOA	CAN	...	...	...	...	...	...
	USA	...	...	...	...	...	...
SOC	ARG	82	57	88	62	86	100		
	CHI	99	17	76	62	86	97		
	PAR	90	65	100	83	100	100		
	URU	8	33	75	100	100	100		
Total and Average		84	66	76	75	81	98		

... No report received; (a) Also includes information on active case-searches.

Issues of the Measles/Rubella Surveillance Bulletin can be accessed at:
<http://www.paho.org/english/ad/fch/im/measles.htm>