



Comparison of clinical and epidemiological characteristics of measles and its differential diagnoses

Disease	Measles	Rubella (a)	Roseola (exanthema subitum)	Erythema infectiosum	Dengue	Chikunguna	Zika
Etiology	Paramyxoviridae, genus Morbillivirus	Togaviridae, genus Rubivirus	Betaherpesviridae, genus Roseolovirus (human herpes virus 6)	Parvoviridae, genus Erythrovirus (human parvovirus B19)	Flaviviridae, genus Flavivirus	Togaviridae, genus Alphavirus	Flaviviridae, genus Flavivirus
Incubation period (days)	7-21	12-23	5-15	4-20	3-14	4-7	2-7
Fever	Yes	Yes	Yes	Yes	Yes	Yes	May appear
Characteristics	High fever	Low grade fever or afebrile	Abrupt and high fever	Low grade fever or afebrile	Mild, occasionally biphasic	High fever	Low grade fever or afebrile
Rash	Si	Yes	Yes	Yes	Frequent	Frequent	Yes
Characteristics	Maculopapular	Maculopapular	Maculopapular	Macular/ Maculopapular	Maculopapular	Maculopapular	Maculopapular
Distribution	Cephalocaudal	Cephalocaudal	Thorax and abdomen	Cephalocaudal	Centrifugal	Cephalocaudal, intensely pruritic	Cephalocaudal, intensely pruritic
Cough	Frequent	No	No	No	No	No	No
Coryza	Frequent	May appear	Yes	Yes	No	No	No
Conjunctivitis	Frequent	May appear	No	No	May appear	May appear (b)	Yes
Arthralgia	No	Frequent	No	May appear (adults)	Frequent	Yes	Frequent
Lymphadenopathy	No	Frequent	May appear	May appear	No	May appear Postauricular	May appear Postauricular

Sources:

- 1) American Public Health Association. Control of Communicable Diseases Manual, 20th edition. Washington, DC: PAHO; 2016.
- 2) Pan American Health Organization. Tool for the diagnosis and care of patients with suspected arboviral diseases. Washington, DC: PAHO; 2017.
- 3) Kliegman R, St Geme J. Nelson Textbook of Pediatrics, 2-Volume Set 21st edition. Elsevier; 2019.
- 4) Cohen J, Powderly W, Opal S. Infectious Diseases, 2-Volume Set. 4th edition. Elsevier; 2016.
- (a) Up to 50% of rubella infections are subclinical or do not present rash.
- (b) Conjunctivitis is uncommon in Chikungunya; however, this symptom is more frequent in children.

Table.1
Classification of Suspect Measles, Rubella, and Congenital Rubella Syndrome (CRS) Cases for Week 1-16, 2025

Subregion and Country		Susp. Cases 2025	Measles Confirmed 2025				Year/Week Last Conf. Measles case	Rubella Confirmed 2025			Year/Week Last Conf. Rubella Case	Diagnosis of Discarded Cases 2025		Congenital Rubella Syndrome			Year/Week Last Conf. CRS Case
			Clin.	Lab.	EPI link	Total		Clin.	Lab.	Total		Dengue	Others	Susp.	Conf.	CRI*	
AND	BOL	71	0	0	...	0	2024-37	0	0	0	2006-03	0	66	0	0	0	...
	COL	246	0	0	...	0	2020-09	0	0	0	2012-31	0	210	0	0	0	2005-34
	ECU	143	0	0	...	0	2018-33	0	0	0	2004-49	7	114	14	0	0	2011-14
	PER	140	0	0	...	0	2024-06	0	0	0	2009-04	1	104	0	0	0	2007-16
	VEN	...	...	...	...	...	2019-48	...	...	...	2007-51	...	...	...	...	...	...
BRA CAP	BRA	509	0	5	...	5	2025-15	0	0	0	2014-40	0	360	6	0	0	2009-34
	CRI	12	0	0	...	0	2023-31	0	0	0	2001-39	0	12	71	0	0	...
	GTM	29	0	0	...	0	2018-03	0	0	0	2006-31	0	29	0	0	0	2005-00
	HND	42	0	0	...	0	1998-16	0	0	0	2004-11	1	39	4	0	0	2001-00
	NIC	52	0	0	...	0	1994-14	0	0	0	2004-19	15	32	8	...	...	2005-00
CAR LAC	PAN	24	0	0	...	0	2011-20	0	0	0	2002-48	0	23	0	0	0	...
	SLV	222	0	0	...	0	2001-19	0	0	0	2006-30	0	222	0	0	0	2001-00
	CAR	149	0	2	...	2	2025-14	0	0	0	2008-18	0	94	0	0	0	1999-00
	CUB	...	...	...	...	...	2019-24	...	...	...	2004-06	...	...	...	...	...	1989-10
	DOM	52	0	0	...	0	2011-18	0	0	0	2019-08	2	46	0	0	0	2007-00
MEX NOA	HTI	67	0	0	...	0	2001-39	0	0	0	2006-21	0	1	16	0	0	...
	MEX	2026	0	570	13	583	2025-15	0	0	0	2018-14	0	976	0	0	0	...
	CAN	...	158	589	430	1177	2025-16	0	0	0	2023-36	...	...	0	0	0	2024-00
	USA	...	...	884	...	884 ^A	2025-16	...	...	...	2024-35	...	...	...	...	...	2017-00
	ARG	48	0	21	1	22	2025-15	0	0	0	2019-47	0	26	0	0	0	2009-27
SOC	CHL	32	0	0	...	0	2023-32	0	0	0	2019-14	0	30	8	0	0	...
	PRY	304	0	0	...	0	2022-37	0	0	0	2005-21	0	243	0	0	0	2003-06
	URY	0	0	0	...	0	2020-07	0	0	0	2001-37	0	0	0	0	0	...
TOTAL		4168	158	2071	444	2673	--	0	0	0	--	26	2627	127	0	0	--

*Congenital Rubella Infection.

...No updated report received

(A) Measles Cases and Outbreaks, CDC website at: <https://www.cdc.gov/measles/cases-outbreaks.html> (Data as of 24 April 2025).



Measles, Rubella, and Congenital Rubella Syndrome Surveillance in the Americas

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Table No.2
Infection Source of Measles and Rubella Confirmed Cases
for the Period of Weeks 1-16, 2025

Subregion and Country		Measles				Rubella		
		I	IR	En.	U	I	IR	U
AND	BOL							
	COL							
	ECU							
	PER							
	VEN							
BRA	BRA				5			
CAP	CRI							
	GTM							
	HND							
	NIC							
	PAN							
	SLV							
CAR	CAR	1			1			
LAC	CUB							
	DOM							
	HTI							
MEX	MEX	3	34		546			
NOA	CAN	27	775		267			
	USA				884			
SOC	ARG	2	17		3			
	CHL							
	PRY							
	URY							
TOTAL		33	826		1706			

I: Imported; IR: Import-related; En: Endemic case; U: Unknown.

Table No.3
Measles/Rubella Suspect Cases Under Investigation
for the Period of Weeks 1-16, 2025

Country	Pending Cases 2024	Cumulative 2025	Week of Onset							% Pend cases
			1-11	12	13	14	15	16		
BOL	22	5	4	0	1	0	0	0	7	
COL	105	36	21	15	0	0	0	0	15	
ECU	27	22	9	10	3	0	...	...	15
PER	11	35	14	5	3	2	7	4	25	
VEN	8	...	...	...	...	...	...	...	...
BRA	56	146	33	17	43	36	17	0	29	
CRI	0	0	0	0	0	0	0	0	0	
GTM	9	0	0	0	0	0	0	0	0	
HND	2	2	2	0	0	0	0	0	5	
NIC	1	5	4	0	0	0	0	1	10	
PAN	1	1	1	0	0	0	0	0	4	
SLV	0	0	0	0	0	0	0	...	0	
CAR	0	54	6	6	10	15	7	10	36	
CUB	0	...	...	...	...	...	...	...	...
DOM	1	4	2	1	1	...	...	...	8
HTI	76	66	52	3	5	2	2	2	99	
MEX	136	467	127	46	63	68	104	59	23	
CAN	NR	NR	NR	NR	NR	NR	NR	NR	NR	
USA	NR	NR	NR	NR	NR	NR	NR	NR	NR	
ARG	0	0	0	0	0	0	0	0	0	
CHL	3	2	1	1	0	0	0	0	6	
PRY	1	54	21	7	4	6	6	10	18	
URY	3	0	0	...	...	...	...	...	0
TOTAL	462	899	297	111	133	129	143	86	22	

... No updated report received; NR-not reporting

Table 4
Indicators of Integrated Measles/Rubella Surveillance for Period of Weeks 1-16, 2025

Subregion and Country		Sites Reporting Weekly		% Suspected cases with adequate investigation	% Suspected cases with adequate sample	% Serum samples received in lab. ≤5 days	% Serum samples with lab. results reported ≤4 days	Rate of Suspected Cases Last 52 weeks (2024/17-2025/16)	
		Total Units	% This Week					Measles/Rubella (100,000 pop.) ^a	CRS (10,000 lb) ^a
AND	BOL	2657	...	94	97	92	93	2.6	0.0
	COL	4793	100	85	44	88	85	2.3	23.0
	ECU	2184	...	62	87	91	74	3.5	0.5
	PER	6326	...	85	84	57	34	1.4	0.0
	VEN	13092	...	...	...	...	...	3.2	0.0
	BRA ^b	...	...	17	55	84	92	1.2	0.2
CAP	CRI	37	...	100	100	92	83	1.1	14.0
	GTM	1506	...	97	100	86	97	1.1	0.0
	HND	310	100	93	98	88	100	3.8	0.8
	NIC	185	...	94	98	98	98	2.6	9.3
	PAN	107	...	79	100	96	100	2.1	0.4
	SLV	1333	...	95	99	99	100	21.7	28.2
CAR	CAR	521	44	52	87	10	49	4.4	0.0
LAC	CUB	168	...	...	...	...	...	11.9	0.0
	DOM	247	...	77	100	85	90	1.6	0.0
	HTI	20	...	81	88	0	3	1.1	2.1
MEX	MEX	20196	96	96	99	80	83	3.1	1.1
NOA	CAN	NR	NR	NR	NR	NR	NR	NR	NR
	USA	NR	NR	NR	NR	NR	NR	NR	NR
SOC	ARG	334	...	35	48	40	42	0.8	1.6
	CHL	533	...	34	91	90	100	0.9	3.6
	PRY	1479	99	86	93	89	90	13.6	1.2
	URY	155	...	0	0	0	0	2.9	0.0
Total and Average*		56183	47	80	88	80	82	2.5	2.2

*Weighted

... No updated report received; NR-not reporting

(a) Source (population data): United Nations, Department of Economic and Social Affairs, Population Division (2024). World Population Prospects 2024, Online Edition.

(b) Measles/rubella indicators correspond to epidemiological weeks 1-9 of 2025.