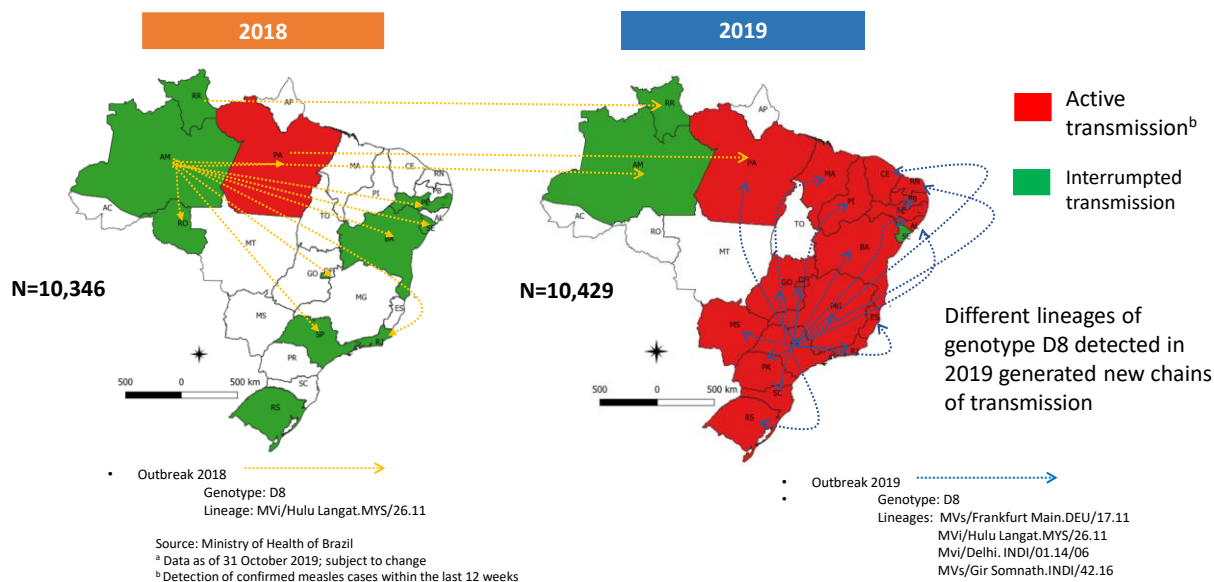




### Transmission pathways of measles virus in Brazil, 2018 - 2019<sup>a</sup>



**Table.1**  
**Classification of Suspect Measles, Rubella, and Congenital Rubella Syndrome (CRS) Cases for Weeks 01-45, 2019**

Subregion and Country	Susp. Cases 2019	Measles Confirmed 2019				Year/Week Last Conf. Measles case	Rubella Confirmed 2019			Year/Week Last Conf. Rubella Case	Diagnosis of Discarded Cases 2019		Congenital Rubella Syndrome			Year/Week Last Conf. CRS Case		
		Clin.	Lab.	EPI link	Total		Clin.	Lab.	Total		Dengue	Others	Susp.	Conf.	CRI*			
AND	BOL	111	0	0	...	0	0	0	2000-40	0	0	0	1	106	8	0	0	...
	COL	4037	1	214	...	215 <sup>a</sup>	2019-45	0	0	0	2012-31	1	1733	292	0	0	0	2005-34
	ECU	174	0	0	0	0	2018-33	0	0	0	2004-49	0	162	0	0	0	0	2011-14
	PER	398	0	2	...	2	2019-18	0	0	0	2009-04	0	387	0	0	0	0	2007-16
	VEN	1447	100	397	23	520 <sup>b</sup>	2019-44	0	0	0	2007-51	6	237	19	0	0	0	...
BRA	BRA	54911	2596	9291	...	11887	2019-44	0	0	0	2014-40	0	22636	30	0	0	0	2009-34
CAP	CRI	49	0	10	...	10	2019-13	0	0	0	2001-39	0	38	25	0	0	0	...
	GTM	337	0	0	...	0	2018-03	0	0	0	2006-31	1	201	2	0	0	0	2005-00
	HND	330	0	0	...	0	1998-16	0	0	0	2004-11	0	318	18	0	0	0	2001-00
	NIC	663	0	0	...	0	1994-14	0	0	0	2004-19	9	631	26	0	0	0	2005-00
	PAN	61	0	0	...	0	2011-20	0	0	0	2002-48	0	56	0	0	0	0	...
	SLV	474	0	0	...	0	2001-19	0	0	0	2006-30	0	474	0	0	0	0	2001-00
CAR	CAR	305	0	3	1	4	2019-07	0	0	0	2008-18	0	291	43	0	0	0	1999-00
LAC	CUB	3083	0	1	...	1 <sup>b</sup>	2019-24	0	0	0	2004-06	0	3083	0	0	0	0	1989-10
	DOM	153	0	0	...	0	2011-18	0	0	0	2007-45	8	134	0	0	0	0	...
	HTI	184	0	0	...	0	2001-39	0	0	0	2006-21	0	131	18	0	0	0	...
MEX	MEX	4766	0	20	...	20	2019-37	0	0	0	2018-14	0	3937	0	0	0	0	...
NOA	CAN	...	...	104	9	113	2019-45	...	...	...	2016-06	0	0	0	...	...	...	2018-39
	USA	...	...	1262	...	1262	2019-45	...	...	...	2019-03	0	0	0	...	...	...	2017-00
SOC	ARG	201	0	46	...	46	2019-44	0	3	3	2019-20	0	150	0	0	0	0	2009-27
	CHL	756	0	10	...	10	2019-43	0	1	1	2019-14	0	725	136	0	0	0	...
	PRY	1337	0	0	...	0	1998-44	0	0	0	2005-21	88	1031	3	0	0	0	2003-06
	URY	70	0	9	...	9	2019-22	...	...	...	2001-37	0	58	0	0	0	0	...
<b>TOTAL</b>		<b>73847</b>	<b>2697</b>	<b>11369</b>	<b>33</b>	<b>14099</b>	<b>--</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>--</b>	<b>114</b>	<b>36519</b>	<b>620</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>--</b>

\*Congenital Rubella Infection.

...No updated report received

(a) Boletín Epidemiológico Semanal, SE 45-2019, Instituto Nacional de Salud, Colombia; (b) PAHO/WHO. Epidemiological Update. Measles 1 November 2019, Washington, D.C.: PAHO/WHO; 2019.



**Table No.2**  
Infection Source of Measles and Rubella Confirmed Cases for the Period of Weeks 01-45, 2019

Subregion and Country		Measles				Rubella			
		I	IR	En.	U	I	IR	CAC	U
AND	BOL	66	130		19				
	COL								
	ECU								
	PER	1	1						
	VEN			520					
BRA	BRA	39		48	11800				
	CAP	1	9						
CAR	CRI								
	GTM								
	HND								
	NIC								
	PAN								
	SLV								
	LAC	4							
	CUB <sup>a</sup>	1							
	DOM								
	HTI								
MEX	MEX	6	14						
	NOA	42	62		9				
SOC	USA	133	1118		11				
	ARG	5	1		40	1			2
	CHL	5	5			1			
	PRY								
	URY	2	6		1				
<b>TOTAL</b>		<b>305</b>	<b>1346</b>	<b>568</b>	<b>11880</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

**Table No.3**  
Measles/Rubella Suspect Cases Under Investigation for the Period of Weeks 01-45, 2019

Country	Pending Cases 2018	Cumulative 2019	Week of Onset							% Pend. Cases
			1-40	41	42	43	44	45		
BOL	3	4	4	0	0	0	0	...	4	
COL	184	118	117	1	0	0	0	0	3	
ECU	84	8	8	0	0	0	0	...	5	
PER	0	9	4	0	1	2	0	2	2	
VEN	2	3	3	0	0	0	0	0	0	
BRA	465	19903	14148	2239	1928	1219	369	0	36	
CAP	23	1	1	0	0	0	0	0	2	
GTM	12	135	135	0	0	0	0	...	40	
HND	0	12	12	0	0	0	0	0	4	
NIC	0	23	12	1	4	3	3	0	3	
PAN	0	5	2	1	1	1	0	...	8	
SLV	0	0	0	0	0	0	0	...	0	
LAC	0	10	8	0	1	0	0	1	3	
CUB	0	0	0	0	0	0	0	0	0	
DOM	0	11	11	0	0	0	0	...	7	
HTI	56	53	53	0	0	0	0	0	29	
MEX	0	809	662	22	41	32	22	30	17	
CAN	...	...	...	...	...	...	...	...	...	
USA	...	...	...	...	...	...	...	...	...	
ARG	107	2	2	0	0	0	0	0	1	
CHL	0	19	13	2	2	0	2	0	3	
PRY	8	218	122	5	21	25	20	25	16	
URY	0	3	3	...	...	...	...	...	4	
<b>TOTAL</b>	<b>944</b>	<b>21346</b>	<b>15320</b>	<b>2271</b>	<b>1999</b>	<b>1282</b>	<b>416</b>	<b>58</b>	<b>29</b>	

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

(a) PAHO/WHO. Epidemiological Update. Measles 1 November 2019, Washington, D.C.: PAHO/WHO; 2019.

... No updated report received

**Table 4**  
Indicators of Integrated Measles/Rubella Surveillance for Period of Weeks 01-45, 2019

Subregion and Country		Sites Reporting Weekly		% Cases with Adequate Investigation	% Cases with Adequate Sample	% Blood Samples Received in Lab. ≤5 days	% Lab. Results ≤4 days	Rate of Suspected Cases Last 52 weeks (2018/46-2019/45)	
		Total Units	% This Week					Measles/Rubella (100,000 pop.)	CRS (10,000 lb)
AND	BOL	2657	...	60	63	65	64	1.2	0.3
	COL	5175	97	93	96	92	97	5.6	9.1
	ECU	2184	...	86	97	77	91	1.7	0.0
	PER	7781	...	87	96	84	49	1.6	0.0
	VEN	13092	...	100	61	10	17	1.8	0.3
CAP	BRA	...	...	72	82	85	21	25.6	0.1
	CRI	57	...	73	86	86	79	1.1	3.7
	GTM	1541	...	85	97	63	86	2.0	0.0
	HND	470	90	78	99	81	98	4.0	2.3
	NIC	185	100	97	95	93	83	11.2	6.2
	PAN	324	...	93	95	75	97	1.6	0.0
	SLV	...	...	73	98	97	95	8.2	0.0
CAR	CAR	763	89	85	97	8	85	4.2	13.2
	LAC	168	...	100	100	100	100	31.7	0.0
	DOM	247	...	22	97	84	75	1.4	0.0
	HTI	652	82	90	93	76	66	1.7	0.7
MEX	MEX	20322	97	95	99	92	90	3.7	0.0
NOA	CAN	...	...	...	...	...	...	...	...
	USA	...	...	...	...	...	...	...	...
SOC	ARG	784	...	19	93	77	58	0.6	0.0
	CHL	767	81	22	98	96	97	5.5	10.7
	PRY	1258	98	76	88	85	78	22.0	0.2
	URY	155	...	97	54	54	46	2.0	0.0
<b>Total and Average*</b>		<b>58582</b>	<b>48</b>	<b>88</b>	<b>94</b>	<b>84</b>	<b>85</b>	<b>11.2</b>	<b>1.1</b>

\*Weighted

... No updated report received