



Confirmed measles cases with D8 genotype and unknown source, Country X, 2017-2018

Subnational level	Municipal level	2017												2018											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Madero	Libertad	1																							
	Cártago						1																		
	Atenas														1										
	Granada																	2	2						
	San Benito				1	2																1	1		
Belen	Morelia		1																						
	San Diego				1	4																			
	Cordoba				3	4															2				
	Valdivia						1																		
	Santiago				1	4																			
	Salinas																				1				
Sucre	Delta																	1							
	San Mateo																				3		2		
	Valencia																					2	2		
	Santos																					1	1		
	Alameda				1																				

Unknown source case
 Import-related case
 Imported D8 genotype case (with travel history)

Using fictional data, table 1 shows the distribution of confirmed measles cases with unknown source of infection by sub-national and municipal levels, where the genotype D8 was identified, in the period 2017 and 2018. The numbers placed in each cell represent the number of confirmed cases. In cases classified as imported-related, the source of infection was not identified. According to the table, genotype D8 circulated scattered in country X, with a few exceptions circled in red. A frequent importation of genotype D8 is observed in Belén and Sucre, although epidemiological links between the reported cases were not detected, following a rigorous investigation. In addition, > 12 months elapsed between the last case with an unknown source of infection reported in 2017 and the first case reported in 2018. Therefore, it was unlikely that an endemic transmission chain with genotype D8 had occurred in country. X.

Table.1
 Classification of Suspect Measles, Rubella, and Congenital Rubella Syndrome (CRS) Cases for Week 12, 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	14	0	0	...	0	0	0	2006-03	0	2	0	0	0	...		
	COL	463	0	19	...	0	0	0	2012-31	0	382	67	0	0	2005-34		
	ECU	...	...	...	...	...	...	...	2018-33	...	...	...	...	...	2011-14
	PER	96	0	0	...	0	0	0	2018-41	0	78	0	0	0	2007-16		
	VEN	2	0	40	...	0	0	0	2019-07	0	2	0	0	0	...		
BRA	BRA	0	...	48	...	...	...	...	2019-09	...	...	0	0	...	2009-34
CAP	CRI	25	0	7	...	0	0	0	2019-12	0	13	37	0	0	...		
	GTM	67	0	0	...	0	0	0	2019-12	0	13	37	0	0	...		
	HND	68	0	0	...	0	0	0	2001-39	0	66	0	0	0	2005-00		
	NIC	111	0	0	...	0	0	0	2006-31	0	66	0	0	0	2005-00		
	PAN	10	0	0	...	0	0	0	2004-11	0	56	3	0	0	2001-00		
	SLV	57	0	0	...	0	0	0	1998-16	0	81	9	0	0	2005-00		
CAR	CAR	59	0	1	1	2	2019-08	0	0	0	2004-19	3	81	9	0	2005-00	
LAC	CUB	663	0	0	...	0	0	0	2011-20	0	8	0	0	0	...		
	DOM	30	0	0	...	0	0	0	2002-48	0	57	0	0	0	2001-00		
	HTI	30	0	0	...	0	0	0	2006-30	0	44	2	0	0	1999-00		
MEX	MEX	689	0	1	...	1	2019-07	0	0	0	2008-18	0	44	2	0	2001-00	
NOA	CAN	24	4	28	2019-12	2004-06	0	6	0	0	1999-10	
	USA	42	345	387 ^c	2019-12	2004-06	0	6	0	0	1989-10	
SOC	ARG	7	0	2	...	2	2019-09	0	0	0	2007-45	1	21	0	0	...	
	CHL	350	0	3	...	3	2019-06	0	0	0	2006-21	0	4	7	0	...	
	PRY	375	0	0	...	0	1998-44	0	0	0	2018-14	0	549	0	0	...	
	URY	1999-08	2016-06	2018-39	
	URY	1999-08	2017-16	2017-00	
	URY	1999-08	2014-22	0	5	0	0	2009-27	
	URY	1999-08	2011-25	0	268	15	0	...	
	URY	1999-08	2005-21	11	230	2	0	2003-06	
	URY	1999-08	2001-37	
TOTAL		3116	0	187	350	537	--	0	0	0	--	15	1872	142	0	0	--

*Congenital Rubella Infection.

...No updated report receive

(a) PAHO/ WHO. Epidemiological Update: Measles. 4 March 2019, Washington, D.C.: PAHO/WHO; 2019;

(b) Ministry of Health Brazil. Report No.37,19 March 2019. Some of the confirmed measles cases in Brazil were among crewmembers of a cruise ship; (c) Provisional data.



Table No.2
Infection Source of Measles and Rubella Confirmed Cases for the Period of Weeks 01-12, 2019

Subregion and Country		Measles				Rubella			
		I	IR	En.	U	I	IR	CAC	U
AND	BOL				9				
	COL	10							
	ECU								
	PER								
	VEN ^a			40					
BRA	BRA ^{a,b}	48							
	CAP	1	6						
GTM	GTM								
	HND								
	NIC								
	PAN								
	SLV								
CAR	CAR	2							
	LAC								
	CUB								
DOM	DOM								
	HTI								
	MEX	1							
NOA	CAN	13	14		1				
	USA	34	345		8				
SOC	ARG	2							
	CHL		1		2				
	PRY								
	URY								
TOTAL		111	366	40	20	0	0	0	0

Table No.3
Measles/Rubella Suspect Cases Under Investigation for the Period of Weeks 01-12, 2019

Country	Pending Cases 2018	Cumulative 2019	Week of Onset							% Pend. Cases
			1-7	8	9	10	11	12		
BOL	2	12	11	0	0	1	0	0	86	
COL	176	62	60	2	0	0	0	0	13	
ECU	84	...	...	...	...	...	...	...	...
PER	0	18	6	1	5	1	2	3	19	
VEN	34	...	...	...	...	...	...	...	...
BRA	...	...	...	...	...	...	...	...	...
CRI	23	5	2	1	0	0	0	2	20	
GTM	12	1	1	0	0	0	0	0	1	
HND	0	12	6	3	0	2	1	0	18	
NIC	0	27	2	0	6	10	6	3	24	
PAN	0	2	2	0	...	...	...	...	20
SLV	0	0	0	0	0	0	0	0	0	
CAR	1	13	2	2	1	5	2	1	22	
CUB	0	591	386	55	50	48	52	0	89	
DOM	18	8	8	0	0	0	0	0	27	
HTI	54	26	23	0	0	2	1	0	87	
MEX	0	139	28	19	19	23	31	19	20	
CAN	...	...	...	...	...	...	...	...	...
USA	...	...	...	...	...	...	...	...	...
ARG	374	0	0	0	0	0	0	0	0	
CHL	5	79	37	6	16	12	8	0	23	
PRY	41	134	37	21	14	21	29	12	36	
URY	1	...	...	...	...	...	...	...	...
TOTAL	825	1129	611	110	111	125	132	40	36	

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

(a) PAHO/WHO. Epidemiological Update: Measles. 4 March 2019, Washington, D.C.: PAHO/WHO; 2019;

(b) Confirmed measles cases in Brazil were among crewmembers of a cruise ship.

... No updated report received

Table 4
Indicators of Integrated Measles/Rubella Surveillance for Period of Weeks 01-12, 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 (2018/13-2019/12)		
		Total Units	% This Week					Measles/Rubella (100,000 pop.)	CRS (10,000 lb)	
AND	BOL	2657	...	14	43	83	83	1.7	0.0	
	COL	...	...	81	95	92	98	11.6	5.9
	ECU	2184	...	...	...	...	...	2.7	0.0
	PER	7781	...	89	98	80	22	3.2	0.0	
	VEN	13092	...	100	100	50	50	8.7	0.0	
CAP	BRA	...	...	...	...	...	...	5.1	0.1
	CRI	57	...	72	96	83	75	1.5	5.5	
	GTM	1541	98	72	94	64	82	2.0	0.1	
	HND	470	90	81	99	88	99	2.3	1.4	
	NIC	185	100	97	98	98	91	4.8	4.7	
	PAN	324	...	90	100	60	100	1.5	0.0	
CAR	SLV	1277	90	70	96	98	98	6.8	0.0	
	LAC	CAR	763	93	76	93	7	76	4.1	10.2
	CUB	168	...	100	100	100	100	27.3	0.0	
DOM	DOM	247	...	10	100	97	73	1.1	0.0	
	HTI	652	83	93	100	47	60	1.5	0.6	
	MEX	20592	97	96	99	88	88	2.9	0.0	
NOA	CAN	...	...	...	...	...	...	...	...
	USA	...	...	...	...	...	...	...	...
	SOC	ARG	784	...	14	100	100	86	2.0	0.3
SOC	CHL	768	...	39	96	96	99	4.8	6.6	
	PRY	1253	98	71	88	73	63	15.1	0.1	
	URY	155	...	...	...	...	...	0.3	0.0
Total and Average*		54950	47	82	96	88	88	5.0	1.0	

*Weighted

... No updated report received