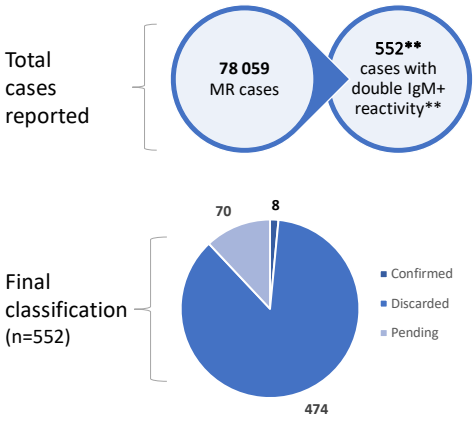
PAHO Pan American Health Organization World Health Organization Regional Office for the Americas

# Weekly Bulletin
## Measles-Rubella-Congenital Rubella Syndrome

*Family, Health Promotion and Life Course/Comprehensive Family Immunization*

***Vol. 28, No. 24*** Measles, Rubella, and Congenital Rubella Syndrome Surveillance in the Americas ***Weeks ending 18 June 2022***

### Double IgM+ reactivity for measles and rubella (MR) in the Region of the Americas, 2016-2021*




**Cases with double reactivity in first serum specimen only and in first and second serum specimens.

**Distribution of double IgM+ reactivity for MR by country, 2016-2021**

| Country | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Total |
|---|---|---|---|---|---|---|---|
| Mexico | | 54 | 20 | 27 | 113 | 87 | 301 |
| Colombia | 6 | 1 | 6 | 18 | 14 | 24 | 69 |
| Chile | 2 | 4 | 10 | 32 | 4 | 1 | 50 |
| Argentina | 1 | 1 | 14 | 18 | 3 | | 37 |
| Guatemala | 1 | 4 | 13 | 5 | | 1 | 23 |
| Costa Rica | | | 8 | 12 | | | 20 |
| Nicaragua | | 1 | 1 | 10 | 2 | 1 | 15 |
| Paraguay | | | | 3 | 1 | 2 | 6 |
| Dominican Republic | | 2 | 1 | 2 | 1 | | 6 |
| Honduras | | 1 | | 3 | 1 | 1 | 6 |
| Bolivia | | | | 1 | 2 | 2 | 5 |
| Haiti | | | 2 | | 1 | 1 | 4 |
| Panama | | | | 1 | | 1 | 2 |
| Peru | | | 1 | 1 | | | 2 |
| Venezuela | 1 | | | | | | 1 |
| Uruguay | | | 1 | | | | 1 |
| Jamaica | | | 1 | | | | 1 |
| Barbados | | | 1 | | | | 1 |
| Belize | | | 1 | | | | 1 |
| Guyana | | | 1 | | | | 1 |
| **Total** | **11** | **68** | **81** | **133** | **142** | **121** | **552** |

*Source: PAHO Immunization data warehouse for case-based measles and rubella data

In the last five years, 552 cases with double IgM positive reactivity for measles and rubella were reported in 20 countries that submit case-by-case surveillance data to PAHO. In more than half of the discarded cases (251 of 474 cases), a second serum specimen was not taken; and only in 44% of these cases a respiratory or urine specimen was obtained. The presence of double IgM reactivity implies a challenge to adequate classification of these cases, for which it is important to collect and analyze thoroughly all the necessary evidence: clinical data of the cases, field investigation and results of additional laboratory testing (for example, molecular tests).

**Table.1**
**Classification of Suspect Measles, Rubella, and Congenital Rubella Syndrome (CRS) Cases for Weeks 1-24, 2022**

| Subregion | Country | Susp. Cases 2022 | Measles Confirmed 2022 | | | | Year/Week Last Conf. Measles case | Rubella Confirmed 2022 | | | Year/Week Last Conf. Rubella Case | Diagnosis of Discarded Cases 2022 | | Congenital Rubella Syndrome | | | Year/Week Last Conf. CRS Case |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Clin. | Lab. | EPI link | Total | | Clin. | Lab. | Total | | Dengue | Others | Susp. | Conf. | CRI* | |
| AND | BOL | 70 | 0 | 0 | … | 0 | 2020-16 | 0 | 0 | 0 | 2006-03 | 1 | 68 | 0 | 0 | 0 | … |
| | COL | 472 | 0 | 0 | … | 0 | 2020-09 | 0 | 0 | 0 | 2012-31 | 0 | 151 | 307 | 0 | 0 | 2005-34 |
| | ECU | 0 | 0 | 0 | … | 0 | 2018-33 | 0 | 0 | 0 | 2004-49 | 0 | 0 | 0 | 0 | 0 | 2011-14 |
| | PER | 59 | 0 | 0 | … | 0 | 2019-18 | 0 | 0 | 0 | 2009-04 | 0 | 52 | 0 | 0 | 0 | 2007-16 |
| | VEN | 166 | 0 | 0 | … | 0 | 2019-33 | 0 | 0 | 0 | 2007-51 | 4 | 162 | 0 | 0 | 0 | … |
| BRA | BRA | 1605 | 1 | 34 | … | 35 | 2022-20 | 0 | 0 | 0 | 2014-40 | 0 | 1089 | 22 | 0 | … | 2009-34 |
| CAP | CRI | 6 | 0 | 0 | … | 0 | 2019-13 | 0 | 0 | 0 | 2001-39 | 0 | 6 | 5 | … | … | … |
| | GTM | 59 | 0 | 0 | … | 0 | 2018-03 | 0 | 0 | 0 | 2006-31 | 0 | 58 | 0 | … | … | 2005-00 |
| | HND | 55 | 0 | 0 | … | 0 | 1998-16 | 0 | 0 | 0 | 2004-11 | 0 | 51 | 9 | 0 | 0 | 2001-00 |
| | NIC | 51 | 0 | 0 | … | 0 | 1994-14 | 0 | 0 | 0 | 2004-19 | 0 | 49 | 13 | 0 | 0 | 2005-00 |
| | PAN | 6 | 0 | 0 | … | 0 | 2011-20 | 0 | 0 | 0 | 2002-48 | 0 | 3 | 0 | 0 | 0 | … |
| | SLV | 316 | 0 | 0 | … | 0 | 2001-19 | 0 | 0 | 0 | 2006-30 | 0 | 316 | 116 | 0 | 0 | 2001-00 |
| CAR | CAR | 10 | 0 | 0 | … | 0 | 2019-48 | 0 | 0 | 0 | 2008-18 | 0 | 10 | 0 | 0 | 0 | 1999-00 |
| LAC | CUB | 886 | … | … | … | … | 2019-24 | … | … | … | 2004-06 | 0 | 886 | 0 | … | … | 1989-10 |
| | DOM | 24 | 0 | 0 | … | 0 | 2011-18 | 0 | 0 | 0 | 2007-45 | 2 | 20 | 0 | 0 | 0 | … |
| | HTI | 77 | 0 | 0 | … | 0 | 2001-39 | 0 | 0 | 0 | 2006-21 | 0 | 51 | 32 | 0 | 0 | … |
| MEX | MEX | 1102 | 0 | 0 | … | 0 | 2020-23 | 0 | 0 | 0 | 2018-14 | 0 | 1013 | 0 | 0 | 0 | … |
| NOA | CAN | … | … | 3 | … | 3 | 2022-19 | 0 | 0 | 0 | 2019-50 | … | … | … | … | … | 2018-39 |
| | USA | … | … | 3 | … | 3 | 2022-22 | 0 | 0 | 0 | 2019-03 | … | … | … | … | … | 2017-00 |
| SOC | ARG | 127 | 0 | 1 | … | 1 | 2022-12 | 0 | 0 | 0 | 2019-47 | 0 | 126 | 0 | 0 | 0 | 2009-27 |
| | CHL | 48 | 0 | 0 | … | 0 | 2020-03 | 0 | 0 | 0 | 2019-14 | 0 | 47 | 25 | 0 | 0 | … |
| | PRY | 240 | 0 | 0 | … | 0 | 1998-44 | 0 | 0 | 0 | 2005-21 | 0 | 231 | 4 | 0 | 0 | 2003-06 |
| | URY | … | … | … | … | … | 2020-07 | … | … | … | 2001-37 | … | … | … | … | … | … |
| **TOTAL** | | **5379** | **1** | **41** | **…** | **42** | **--** | **0** | **0** | **0** | **--** | **7** | **4389** | **533** | **0** | **0** | **--** |

*Congenital Rubella Infection. …No updated report received

*Vol. 28, No. 24*

**Table No.2**
**Infection Source of Measles and Rubella Confirmed Cases for the Period of Weeks 1-24, 2022**

| Subregion | Country | Measles | | | | Rubella | | |
|---|---|---|---|---|---|---|---|---|
| | | I | IR | En. | U | I | IR | U |
| AND | BOL | | | | | | | |
| | COL | | | | | | | |
| | ECU | | | | | | | |
| | PER | | | | | | | |
| | VEN | | | | | | | |
| BRA | BRA | | | 35 | | | | |
| CAP | CRI | | | | | | | |
| | GTM | | | | | | | |
| | HND | | | | | | | |
| | NIC | | | | | | | |
| | PAN | | | | | | | |
| | SLV | | | | | | | |
| CAR | CAR | | | | | | | |
| LAC | CUB | | | | | | | |
| | DOM | | | | | | | |
| | HTI | | | | | | | |
| MEX | MEX | | | | | | | |
| NOA | CAN | 3 | | | | | | |
| | USA | 3 | | | | | | |
| SOC | ARG | 1 | | | | | | |
| | CHL | | | | | | | |
| | PRY | | | | | | | |
| | URY | | | | | | | |
| **TOTAL** | | **7** | **0** | **35** | **0** | **0** | **0** | **0** |

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

**Table No.3**
**Measles/Rubella Suspect Cases Under Investigation for the Period of Weeks 1-24, 2022**

| Country | Pending Cases 2021 | Cumulative 2022 | Week of Onset | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1-19 | 20 | 21 | 22 | 23 | 24 | % Pend. cases |
| BOL | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| COL | 133 | 321 | 229 | 20 | 38 | 16 | 11 | 7 | 68 |
| ECU | 53 | 0 | 0 | … | … | … | … | … | 0 |
| PER | 0 | 7 | 3 | 0 | 1 | 2 | 1 | … | 12 |
| VEN | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BRA | 22 | 481 | 219 | 74 | 87 | 59 | 42 | 0 | 30 |
| CRI | 3 | 0 | 0 | … | … | … | … | … | 0 |
| GTM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | … | 2 |
| HND | 1 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 7 |
| NIC | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 4 |
| PAN | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 50 |
| SLV | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CAR | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CUB | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DOM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 8 |
| HTI | 21 | 26 | 12 | 6 | 1 | 2 | 3 | 2 | 34 |
| MEX | 58 | 89 | 27 | 9 | 6 | 8 | 20 | 19 | 8 |
| CAN | … | … | … | … | … | … | … | … | … |
| USA | … | … | … | … | … | … | … | … | … |
| ARG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHL | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| PRY | 0 | 9 | 4 | 1 | 0 | 2 | 1 | 1 | 4 |
| URY | 0 | … | … | … | … | … | … | … | … |
| **TOTAL** | **297** | **947** | **507** | **110** | **133** | **89** | **78** | **30** | **18** |

… No updated report

**Table 4**
**Indicators of Integrated Measles/Rubella Surveillance for Period of Weeks 1-24, 2022**

| Subregion | 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 (2021/25-2022/24) | |
|---|---|---|---|---|---|---|---|---|---|
| | | Total Units | % This Week | | | | | Measles/Rubella (100,000 pop.)[a] | CRS (10,000 lb)[a] |
| AND | BOL | 4156 | 91 | 94 | 94 | 90 | 91 | 1.2 | 0.0 |
| | COL | 5296 | … | 8 | 8 | 43 | 31 | 1.9 | 3.2 |
| | ECU | 2184 | … | 0 | 0 | 0 | 0 | 0.8 | 0.0 |
| | PER | 7781 | … | 90 | 78 | 40 | 31 | 0.3 | 0.0 |
| | VEN | 13092 | … | 100 | 96 | 13 | 7 | 1.9 | 0.0 |
| | BRA | … | … | … | … | 92 | 80 | 1.3 | 0.2 |
| CAP | CRI | 82 | … | 100 | 100 | 100 | 100 | 0.2 | 12.0 |
| | GTM | 1541 | … | 100 | 92 | 83 | 93 | 0.5 | 0.0 |
| | HND | 469 | 93 | 85 | 100 | 95 | 96 | 0.9 | 1.3 |
| | NIC | 185 | … | 100 | 96 | 90 | 94 | 1.7 | 4.9 |
| | PAN | 324 | … | 33 | 100 | 67 | 100 | 0.5 | 0.0 |
| | SLV | 1305 | … | 89 | 99 | 98 | 96 | 7.9 | 24.3 |
| CAR | CAR | 758 | 61 | 90 | 100 | 0 | 90 | 0.2 | 0.0 |
| LAC | CUB | 168 | … | 100 | 100 | 100 | 100 | 11.8 | 0.0 |
| | DOM | 247 | … | 21 | 67 | 59 | 77 | 0.4 | 0.0 |
| | HTI | 659 | 96 | 88 | 96 | 27 | 52 | 1.2 | 2.2 |
| MEX | MEX | 20093 | … | 93 | 99 | 94 | 95 | 1.5 | 0.0 |
| NOA | CAN | ... | … | ... | ... | ... | ... | ... | ... |
| | USA | ... | … | ... | ... | ... | ... | ... | ... |
| SOC | ARG | 784 | … | 0 | 69 | 59 | 52 | 0.4 | 0.0 |
| | CHL | 799 | 76 | 54 | 88 | 93 | 98 | 0.4 | 5.7 |
| | PRY | 1398 | 99 | 78 | 96 | 83 | 99 | 7.7 | 0.6 |
| | URY | 155 | … | … | … | … | … | 0.0 | 0.0 |
| **Total and Average*** | | **61476** | **12** | **82** | **86** | **84** | **81** | **1.5** | **0.9** |

*Weighted

… No updated report received

(a) Source (population data): *United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019, Online Edition. International Programs Center, Population Division, U.S. Census Bureau IDB Release Date: September 2019.*