Measles, Rubella and Congenital Rubella Syndrome (CRS) Country Profile

Dominican Republic

Pan American Health Organization

Introduction

The measles and rubella country profile aims to facilitate the analysis of data compiled in the last five years. This profile was only developed for those countries who officially reported vaccination coverage and case by case surveillance and laboratory data to the Pan American Health Organization (PAHO). There may be minor differences in the country profile if the country has updated data that was not reported to PAHO. The country profile will be automatically updated twice per year: at the end of April (surveillance data) and at the end of September (vaccination coverage data).

General Information

Table 1: De	mographic	data,	2022.
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Demographic group	Population
1 year of age	199,462
Total population	$11,\!228,\!842$

Table 2: Last endemic cases by year and disease.

Measles	Rubella	CRS
2001	2006	2007

Table 3: Vaccination schedule.

Vaccine	1st Dose	2nd Dose	MMR2 Year Introduced
MMR	12 mo	18 mo	2018

Table 4: Accumulation of susceptibles for measles and rubella.

Year of the	Vaccine	Age	Number	Coverage of the	Number of	Year of
last	used (M,	group	vaccinated	follow-up	susceptibles	\mathbf{next}
follow-up	MR,	vacci-	(numera-	$\operatorname{campaign}$	1-4 years of	cam-
$\operatorname{campaign}$	MMR)	nated	$\operatorname{tor})$	(B/C)*100	age	paign
2015	MR	1-4	742,792	95.37	73,226	2021
		years				

Epidemiology and Quality of Surveillance

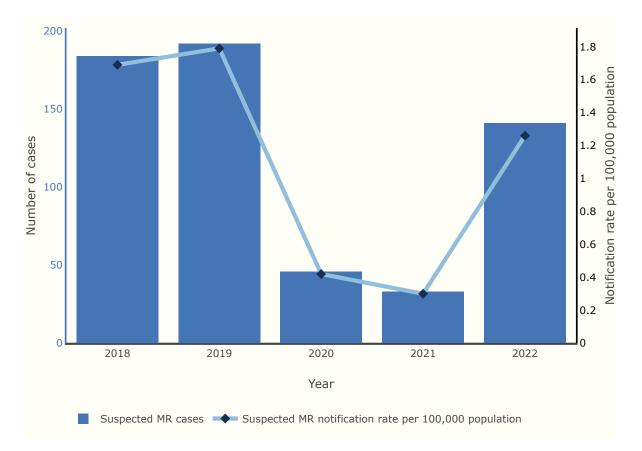


Figure 1: Distribution of suspected MR cases and notification rate at the national level, 2018-2022.

Table 5: Distribution of suspected MR cases and notification rate at the national level, 2018-2022.

	2018	2019	2020	2021	2022
Suspected MR cases	184	192	46	33	141
Suspected MR notification rate per 100,000 population	1.69	1.79	0.42	0.3	1.26

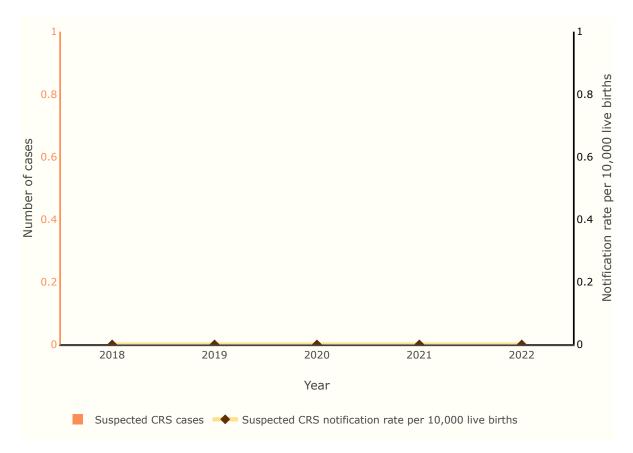
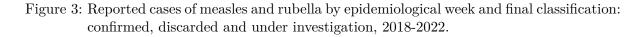


Figure 2: Distribution of suspected CRS cases and notification rate at the national level, 2018-2022.

Table 6: Distribution of suspected CRS cases and notification rate at the national level, 2018-2022.

	2018	2019	2020	2021	2022
Suspected CRS cases	0	0	0	0	0
Suspected CRS notification rate per 10,000 live births	0	0	0	0	0



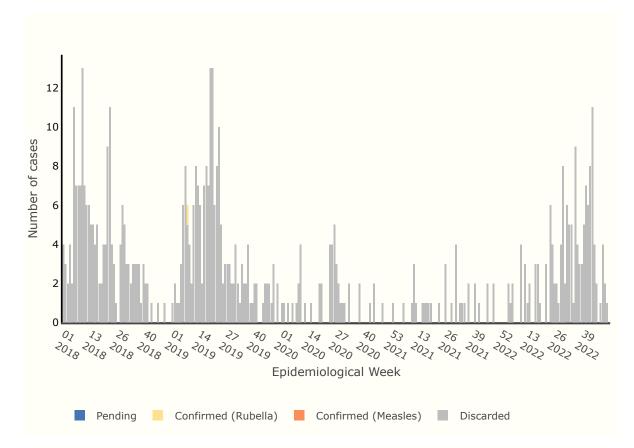
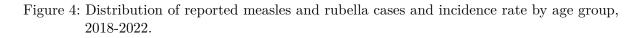
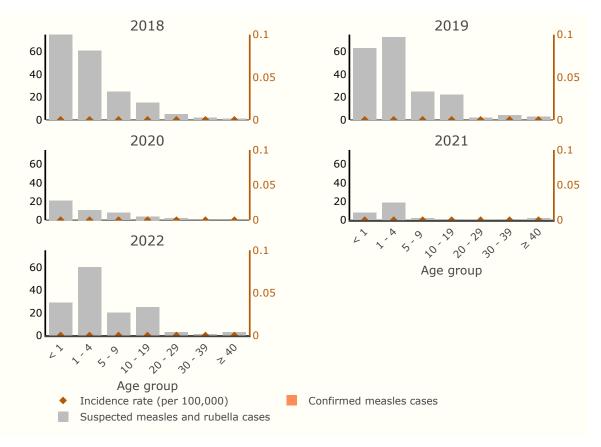


Table 7: Reported cases of measles and rubella by epidemiological year and final classification, 2018-2022.

Classification	2018	2019	2020	2021	2022
Confirmed (Measles)	0	0	0	0	0
Confirmed (Rubella)	0	1	0	0	0
Pending	0	0	0	0	0
Discarded	184	191	46	33	141
Total	184	192	46	33	141





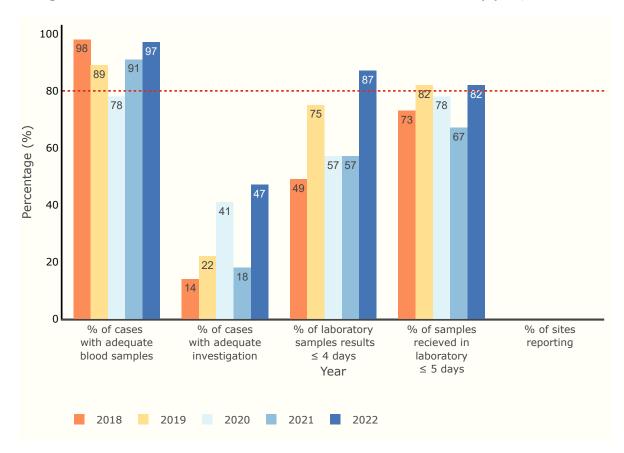


Figure 5: Performance indicators of measles and rubella surveillance by year, 2018-2022.

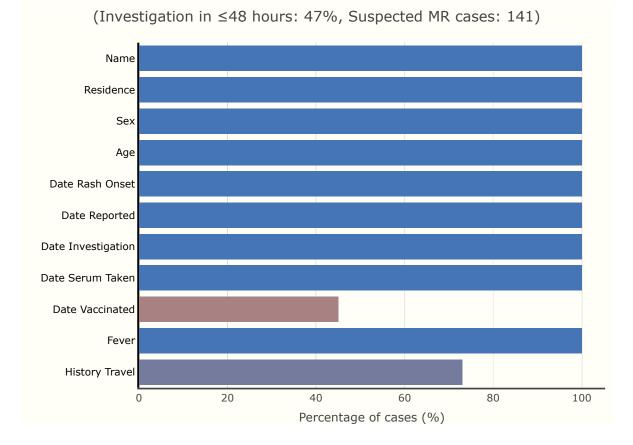


Figure 6: Proportion of the 11 variables reported for adequate investigation indicator, 2022.

Table 8: Municipalities reporting measles and rubella suspected cases by year, 2018-2022.

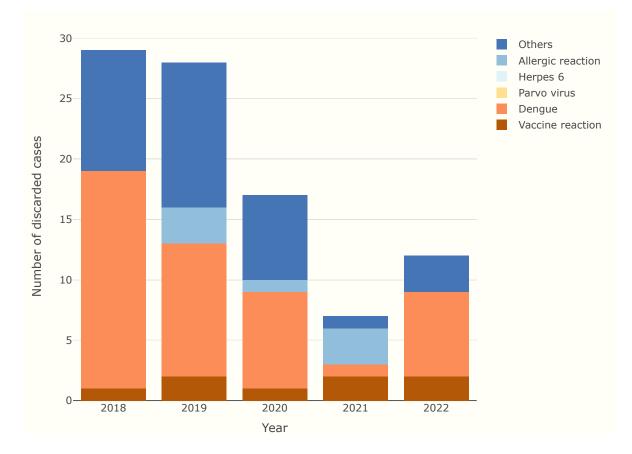
	No. of municipalities	Total municipalities in	% of municipalities reporting
Year	reporting suspected cases	the country	suspected cases
2018	48	157	31
2019	53	157	34
2020	22	157	14
2021	18	157	12
2022	55	157	35

Laboratory Surveillance

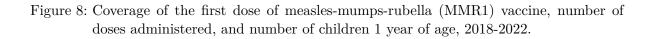
		Criteria	Criteria for discarding			No. of cases discarded by other differential diagnosis					
Year	No. of suspected cases reported	No. of discarded cases	IgM Negative	No data	Others	Vaccine reaction	Dengue	Parvo virus	Herpes 6	Allergic reaction	Others
2018	184	184	154	1	29	1	18	0	0	0	10
2019	192	191	162	1	28	2	11	0	0	3	12
2020	46	46	29	0	17	1	8	0	0	1	7
2021	33	33	26	0	7	2	1	0	0	3	1
2022	141	141	129	0	12	2	7	0	0	0	3

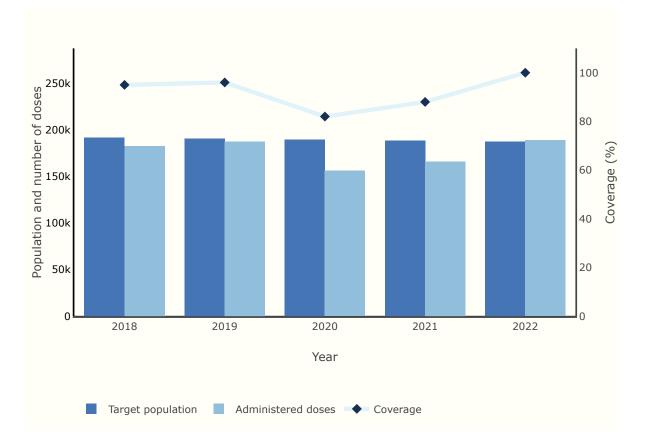
Table 9: Criteria used to discard suspected measles and rubella cases by year, 2018-2022.

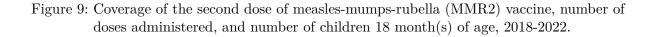
Figure 7: Distribution of discarded measles and rubella suspected cases by other differential diagnosis, 2018-2022.



Analysis of Vaccination Coverage and Population Cohorts







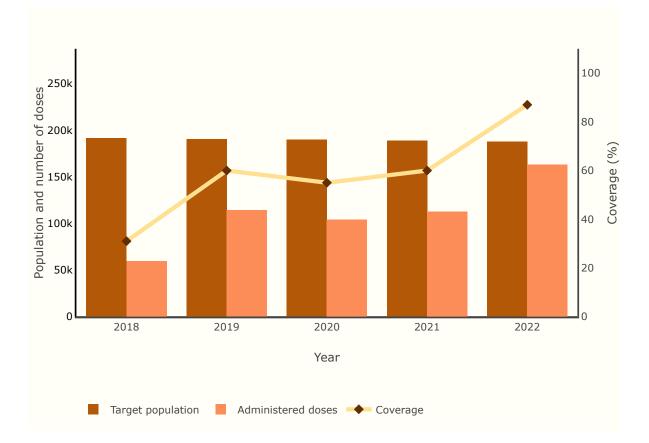
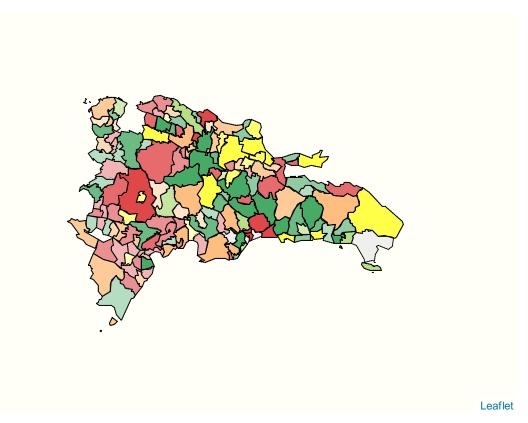
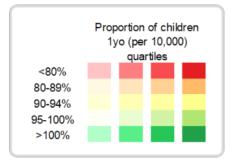


Table 10: Vaccination coverage with first and second dose of measles-mumps-rubella (MMR1 and MMR2) vaccines by target population and administered doses, 2018-2022.

		MMR1			MMR2	
Year	Administered doses	Target population	Coverage	Administered doses	Target population	Coverage
2018	182,863	191,614	95	59,585	191,614	31
2019	$187,\!272$	$190,\!554$	96	$114,\!115$	$190,\!554$	60
2020	156,096	189,790	82	104,242	189,790	55
2021	$165,\!884$	188,705	88	$112,\!827$	188,705	60
2022	$188,\!845$	$187,\!615$	100	163, 165	$187,\!615$	87

Figure 10: Subnational coverage of the first dose of measles-mumps-rubella (MMR1) vaccine and proportion of children aged 1 year, 2021





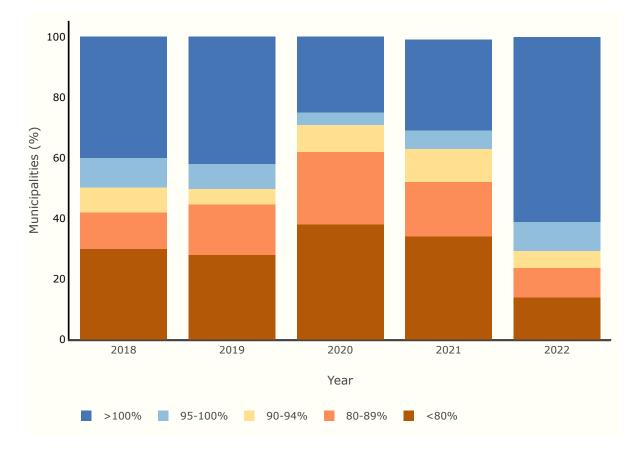


Figure 11: Proportion of municipalities by MMR1 vaccination coverage ranges, 2018-2022.

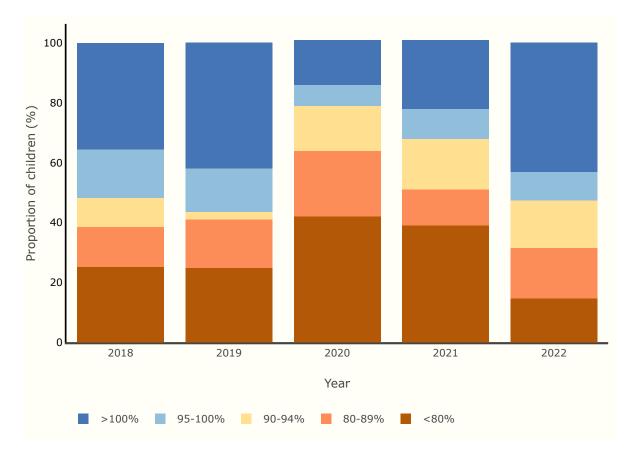


Figure 12: Proportion of children living in those municipalities for MMR1 vaccination coverage ranges, 2018-2022.

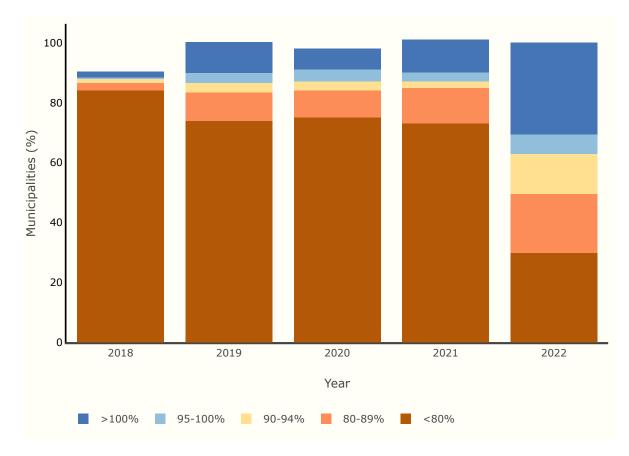


Figure 13: Proportion of municipalities by MMR2 vaccination coverage ranges, 2018-2022.

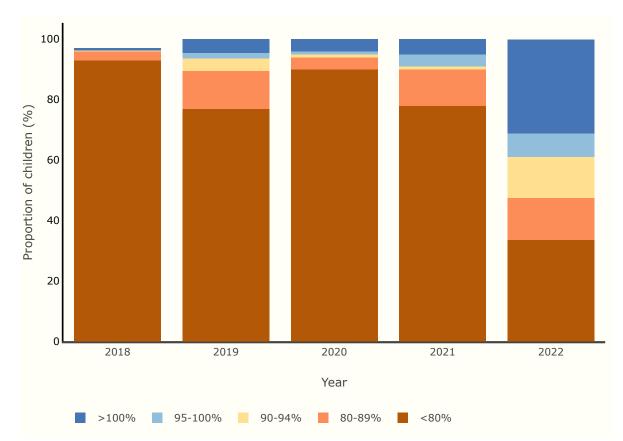


Figure 14: Proportion of children living in those municipalities for MMR2 vaccination coverage ranges, 2018-2022.

Table 11: Proportion of municipalities with MMR1 and MMR2 coverage ranges and proportion of children living in those municipalities, 2018-2022.

		MMR1		MMR2		
Year	Coverage range $(\%)$	MMR1	MMR2	MMR1	MMR2	
2022	<80	14.0	29.9	14.7	33.7	
2022	80-89	9.6	19.7	16.9	13.8	
2022	90-94	5.7	13.4	15.8	13.6	
2022	95-100	9.6	6.4	9.5	7.8	
2022	>100	61.1	30.6	43.1	31.0	
2021	<80	34.0	73.0	39.0	78.0	
2021	80-89	18.0	12.0	12.0	12.0	
2021	90-94	11.0	2.0	17.0	1.0	

$2021 \\ 2021$	95-100 >100	$6.0 \\ 30.0$	$3.0 \\ 11.0$	$\begin{array}{c} 10.0\\ 23.0\end{array}$	$\begin{array}{c} 4.0\\ 5.0\end{array}$
2020 2020 2020 2020 2020	<80 80-89 90-94 95-100 >100	38.0 24.0 9.0 4.0 25.0	75.0 9.0 3.0 4.0 7.0	42.0 22.0 15.0 7.0 15.0	90.0 4.0 1.0 1.0 4.0
2019 2019 2019 2019 2019	<80 80-89 90-94 95-100	$28.0 \\ 16.6 \\ 5.1 \\ 8.3$	73.9 9.6 3.2 3.2	25.0 16.1 2.5 14.5	$76.9 \\ 12.7 \\ 4.0 \\ 1.9$
 2019 2018 2018 2018 2018 2018 	>100 <80 80-89 90-94 95-100 >100	42.0 29.9 12.1 8.3 9.6 40.1	$10.2 \\ 84.1 \\ 2.5 \\ 1.3 \\ 0.6 \\ 1.9$	$\begin{array}{c} 41.9\\ 25.2\\ 13.3\\ 9.8\\ 16.1\\ 35.5 \end{array}$	4.6 92.9 3.1 0.2 0.1 0.8

References

Section	Sources		
General Information	 [1] United Nations, Department of Economic and Social Affairs, Population Division (2022). World Population Prospects 2022, Online Edition. [2] Country reports through the electronic PAHO-WHO/UNICEF Joint 		
Epidemiology and Quality of Surveillance	 Reporting Form (eJRF). [3] Integrated Surveillance Information System (ISIS) and country reports to CIM/PAHO. [2] Country reports through the electronic PAHO-WHO/UNICEF Joint 		
Laboratory Surveillance	Reporting Form (eJRF). [3] Integrated Surveillance Information System (ISIS) and country reports to CIM/PAHO.		
Analysis of Vaccination Coverage and Population Cohorts	[2] Country reports through the electronic PAHO-WHO/UNICEF Joint Reporting Form (eJRF).		