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

Panama

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: Demographic data, 2022.

Demographic group	Population
1 year of age	76,013
Total population	4,408,608

Table 2: Last endemic cases by year and disease.

Measles	Rubella	CRS
1995	2002	1999

Table 3: Vaccination schedule.

Vaccine	1st Dose	2nd Dose	MMR2 Year Introduced
MMR	12 mo	18 mo	1992

Table 4: Accumulation of susceptibles for measles and rubella.

Year of the last follow-up campaign	Vaccine used (M, MR, MMR)	Age group vaccinated	Number vaccinated (numerator)	Coverage of the follow-up campaign (B/C)*100	Number of susceptibles 1-4 years of age	Year of next campaign
2018	MR	1-4 years	288,274	97.38	93,012	2022

Epidemiology and Quality of Surveillance

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

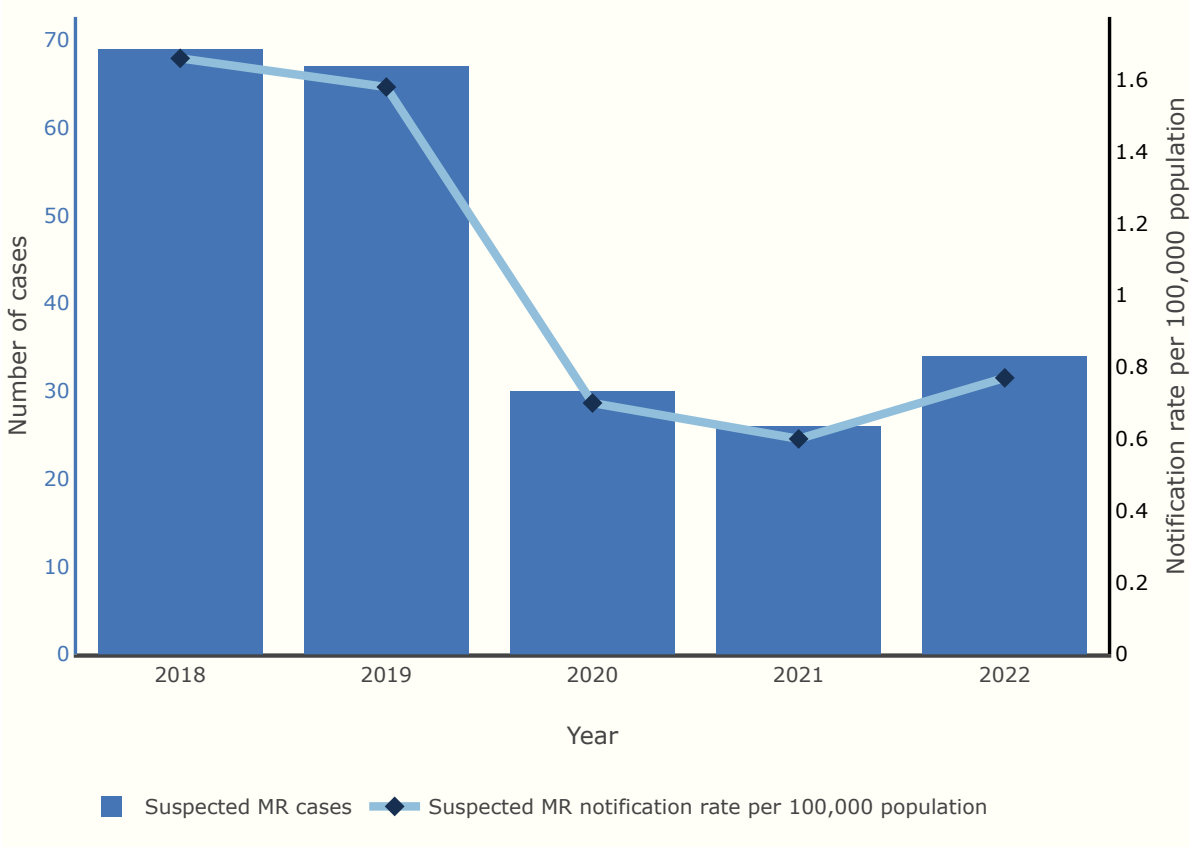


Table 5: Distribution of suspected MR cases and notification rate at the national level, 2018-2022.

	2018	2019	2020	2021	2022
Suspected MR cases	69	67	30	26	34
Suspected MR notification rate per 100,000 population	1.66	1.58	0.7	0.6	0.77

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

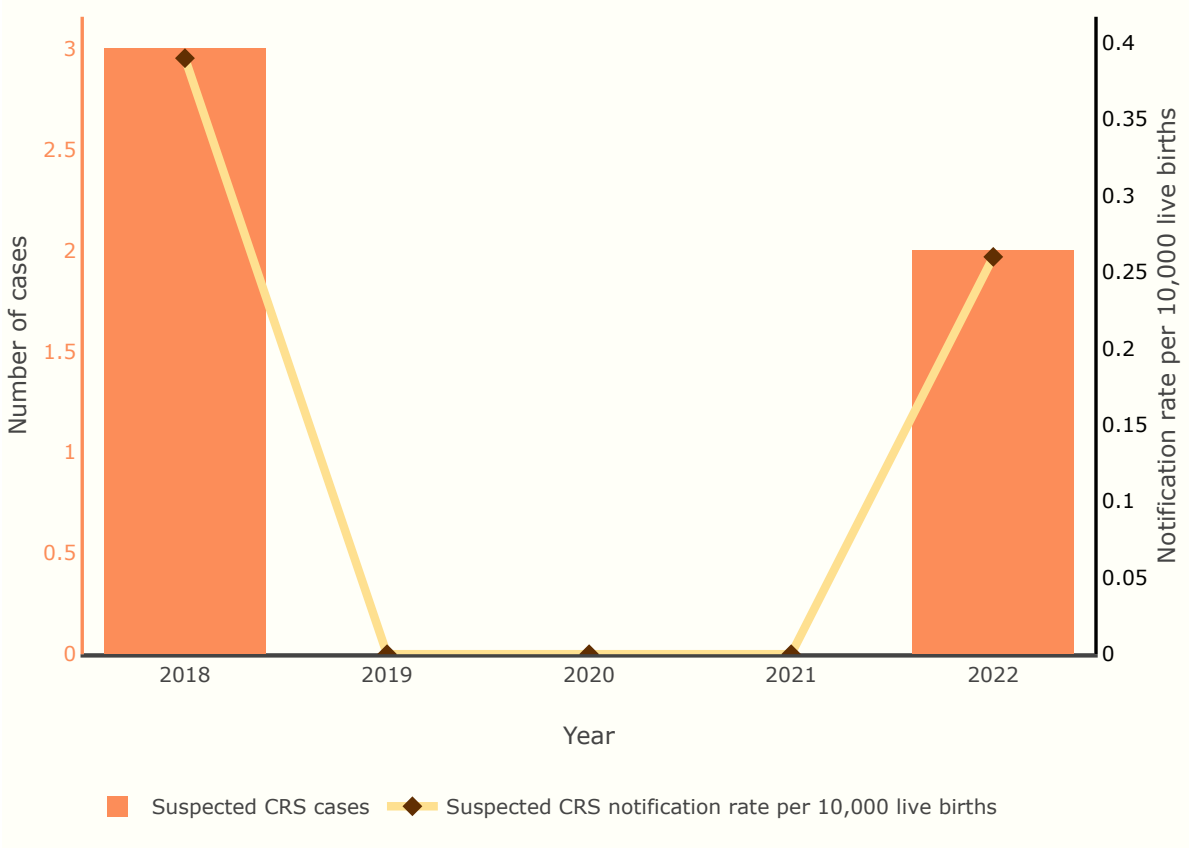


Table 6: Distribution of suspected CRS cases and notification rate at the national level, 2018-2022.

	2018	2019	2020	2021	2022
Suspected CRS cases	3	0	0	0	2
Suspected CRS notification rate per 10,000 live births	0.39	0	0	0	0.26

Figure 3: Reported cases of measles and rubella by epidemiological week and final classification: confirmed, discarded and under investigation, 2018-2022.

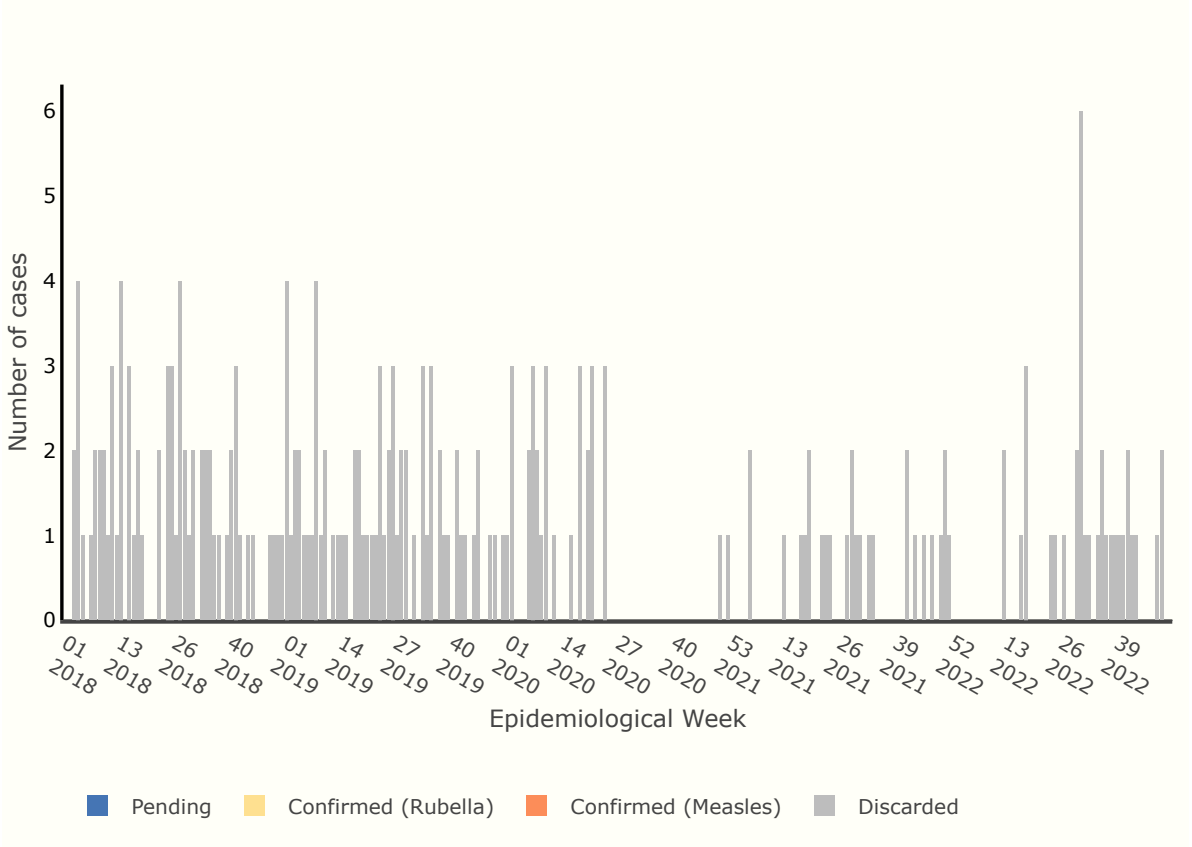


Table 7: Reported cases of measles and rubella by epidemiological year and final classification, 2018-2022.

Classification	2018	2019	2020	2021	2022
Confirmed (Measles)	0	0	0	0	0
Confirmed (Rubella)	0	0	0	0	0
Pending	0	0	0	0	0
Discarded	69	67	30	26	34
Total	69	67	30	26	34

Figure 4: Distribution of reported measles and rubella cases and incidence rate by age group, 2018-2022.

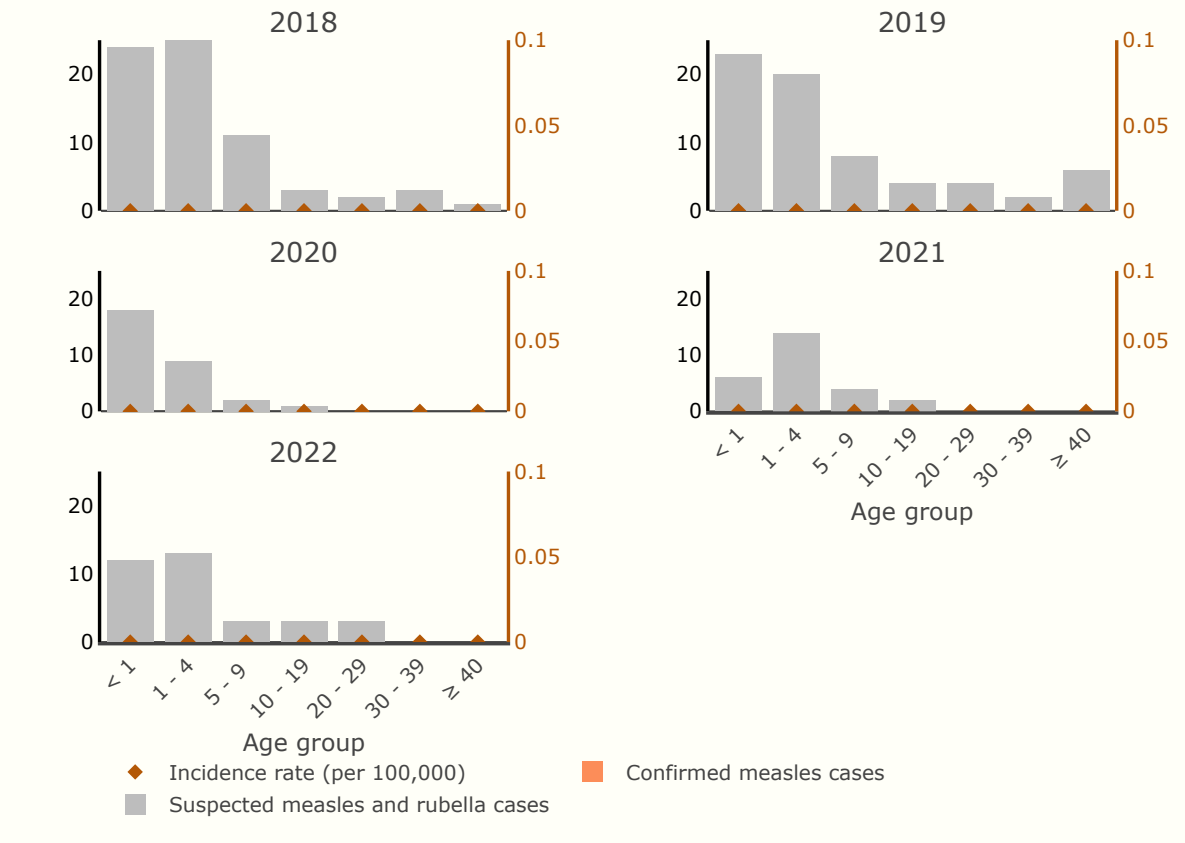


Figure 5: Performance indicators of measles and rubella surveillance by year, 2018-2022.

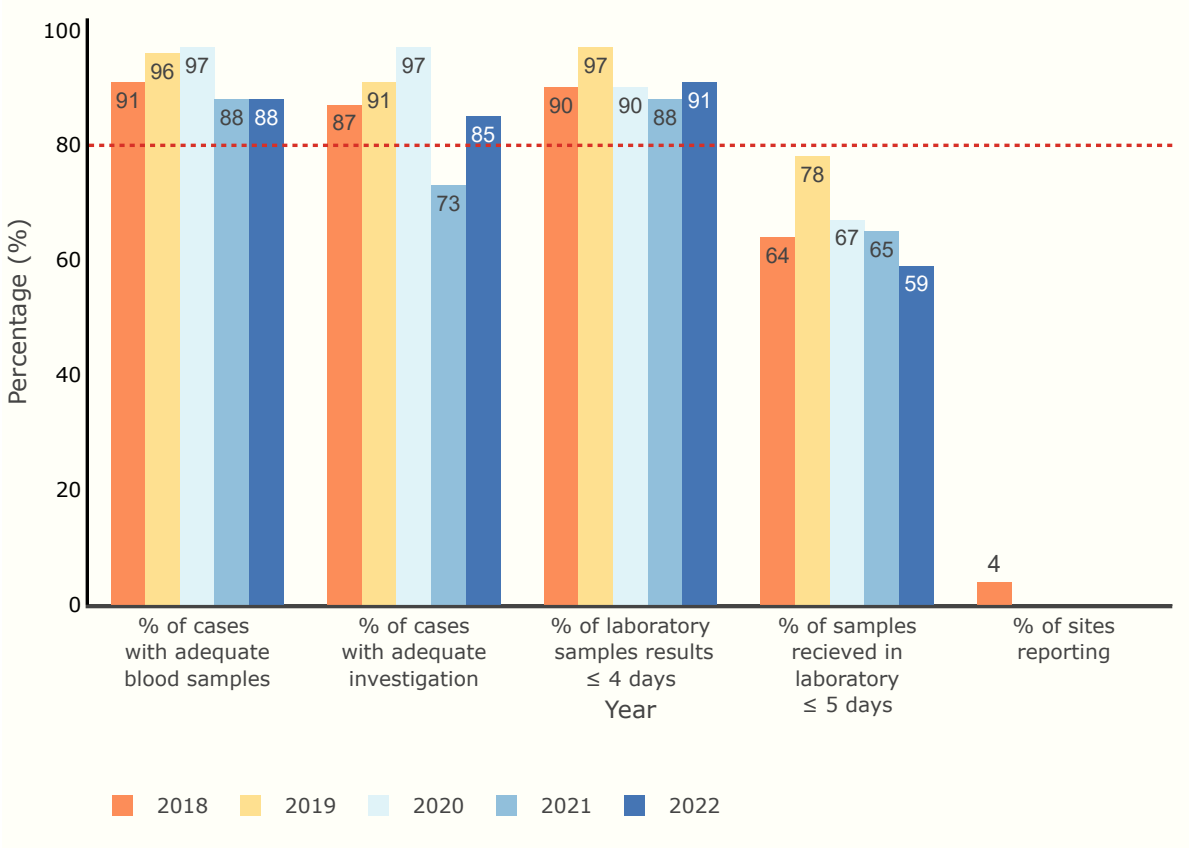


Figure 6: Proportion of the 11 variables reported for adequate investigation indicator, 2022.

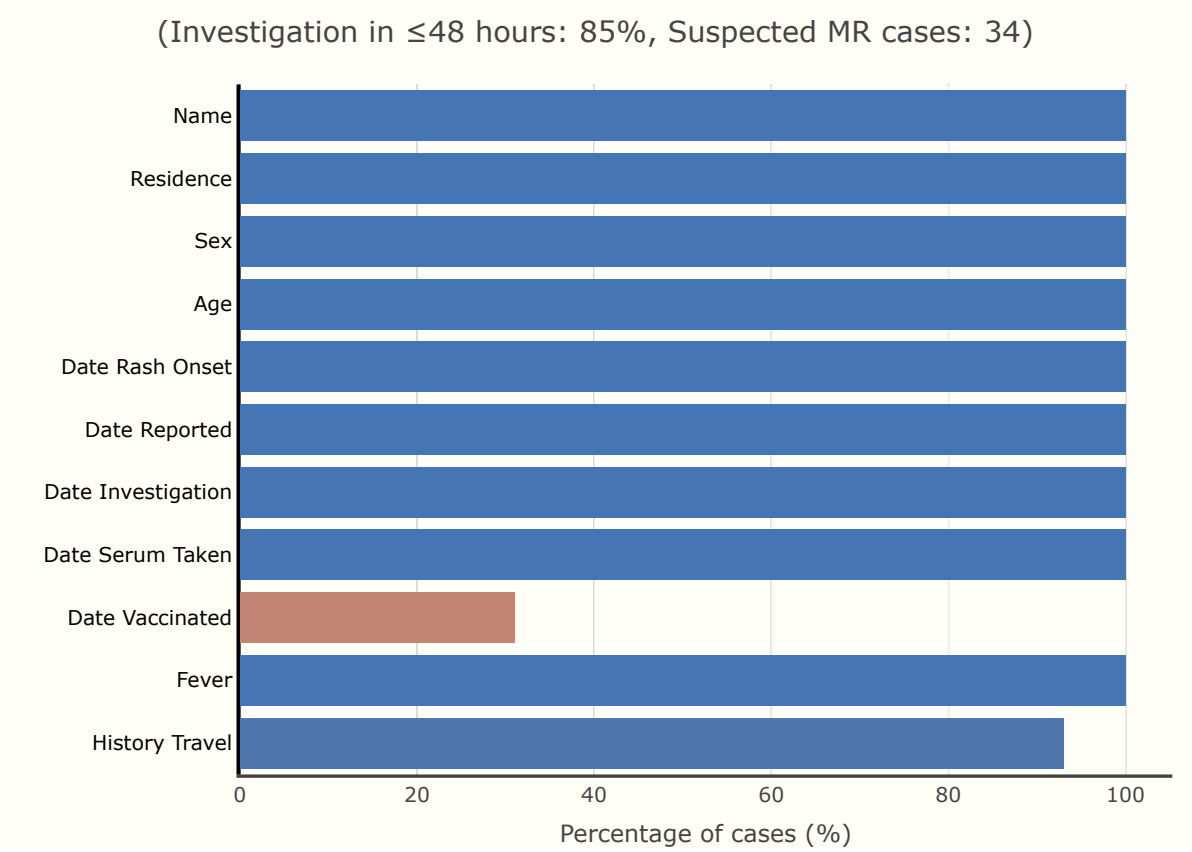


Table 8: Municipalities reporting measles and rubella suspected cases by year, 2018-2022.

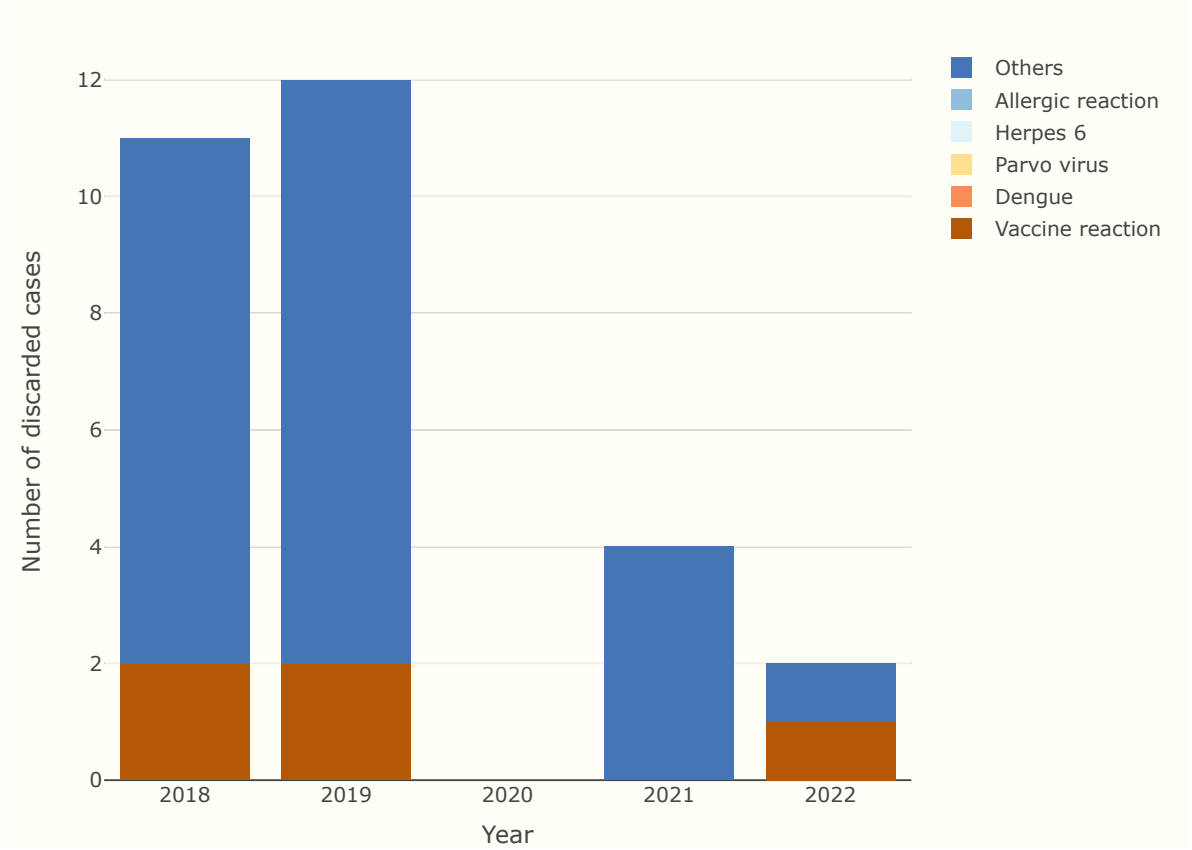
Year	No. of municipalities reporting suspected cases	Total municipalities in the country	% of municipalities reporting suspected cases
2018	17	78	22
2019	19	78	24
2020	11	78	14
2021	15	81	18
2022	14	82	17

Laboratory Surveillance

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

Year	No. of suspected cases reported	No. of discarded cases	Criteria for discarding			No. of cases discarded by other differential diagnosis					
			IgM Negative	No data	Others	Vaccine reaction	Dengue	Parvo virus	Herpes 6	Allergic reaction	Others
2018	69	69	58	0	11	2	0	0	0	0	9
2019	67	67	55	0	12	2	0	0	0	0	10
2020	30	30	30	0	0	0	0	0	0	0	0
2021	26	26	22	0	4	0	0	0	0	0	4
2022	34	34	32	0	2	1	0	0	0	0	1

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



Analysis of Vaccination Coverage and Population Cohorts

Figure 8: Coverage of the first dose of measles-mumps-rubella (MMR1) vaccine, number of doses administered, and number of children 1 year of age, 2017-2021.

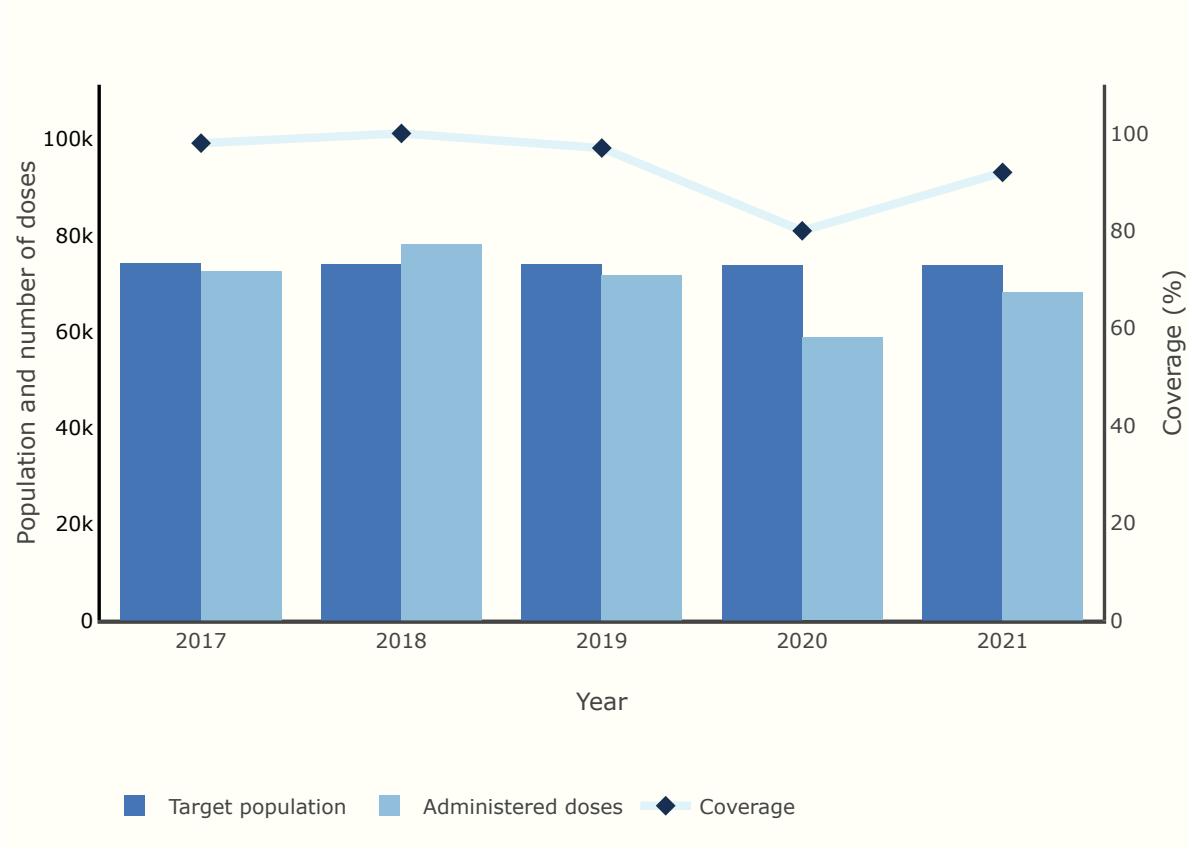


Figure 9: Coverage of the second dose of measles-mumps-rubella (MMR2) vaccine, number of doses administered, and number of children 18 month(s) of age, 2017-2021.

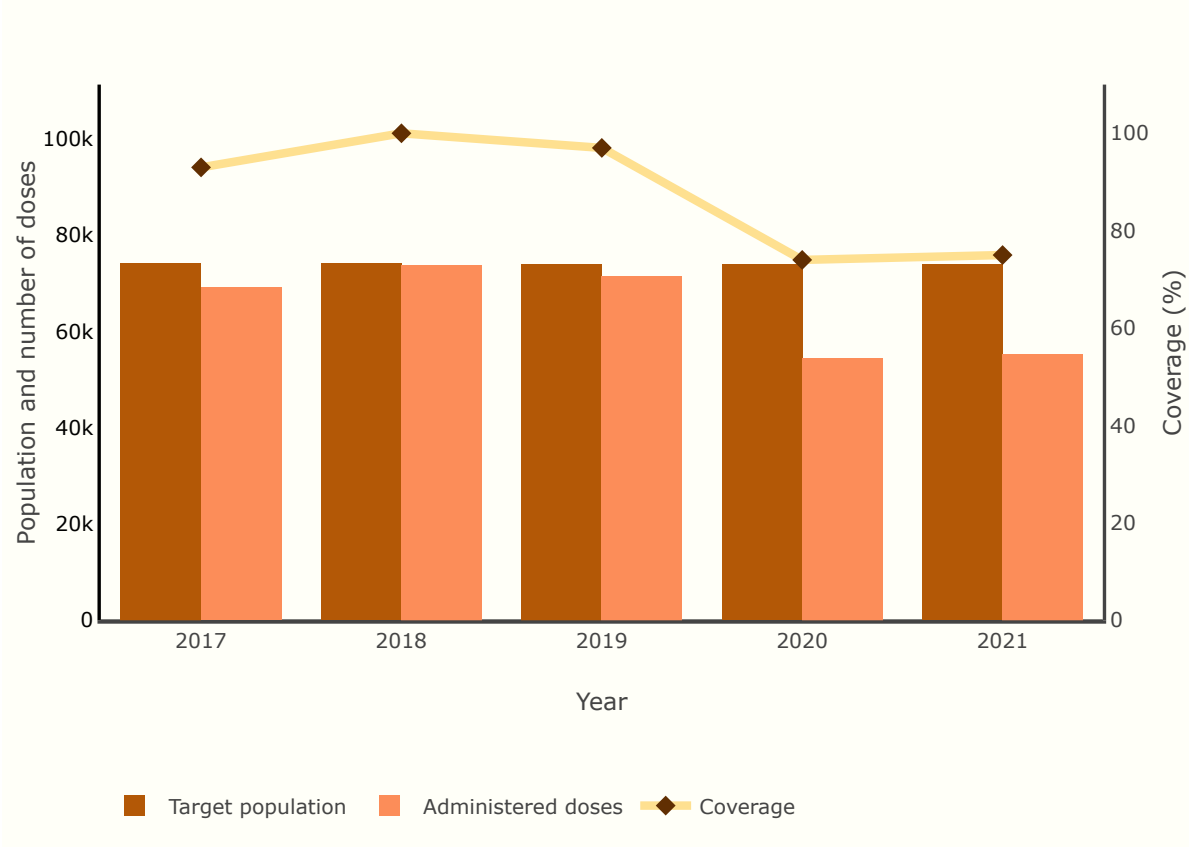


Table 10: Vaccination coverage with first and second dose of measles-mumps-rubella (MMR1 and MMR2) vaccines by target population and administered doses, 2017-2021.

	MMR1			MMR2		
Year	Administered doses	Target population	Coverage	Administered doses	Target population	Coverage
2017	72,682	74,222	98	69,184	74,222	93
2018	78,188	74,116	100	73,847	74,116	100
2019	71,756	74,080	97	71,613	74,080	97
2020	58,804	73,952	80	54,573	73,952	74
2021	68,229	73,943	92	55,383	73,943	75

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

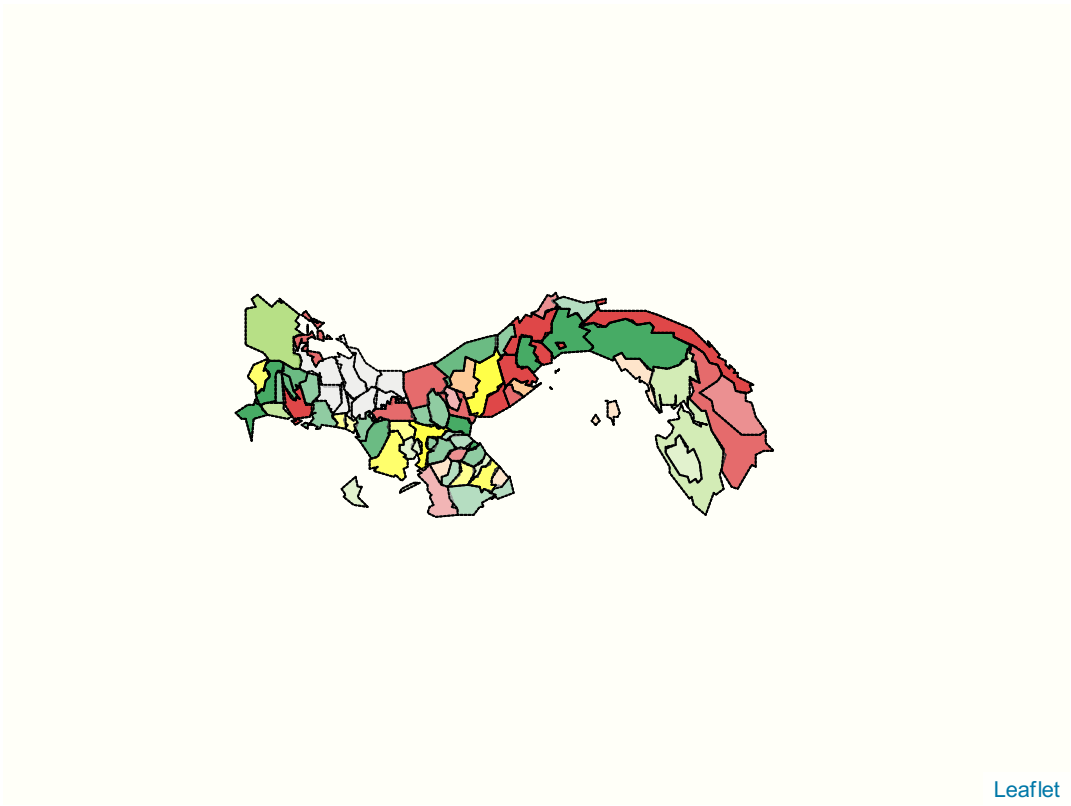


Figure 11: Proportion of municipalities by MMR1 vaccination coverage ranges, 2018-2022.

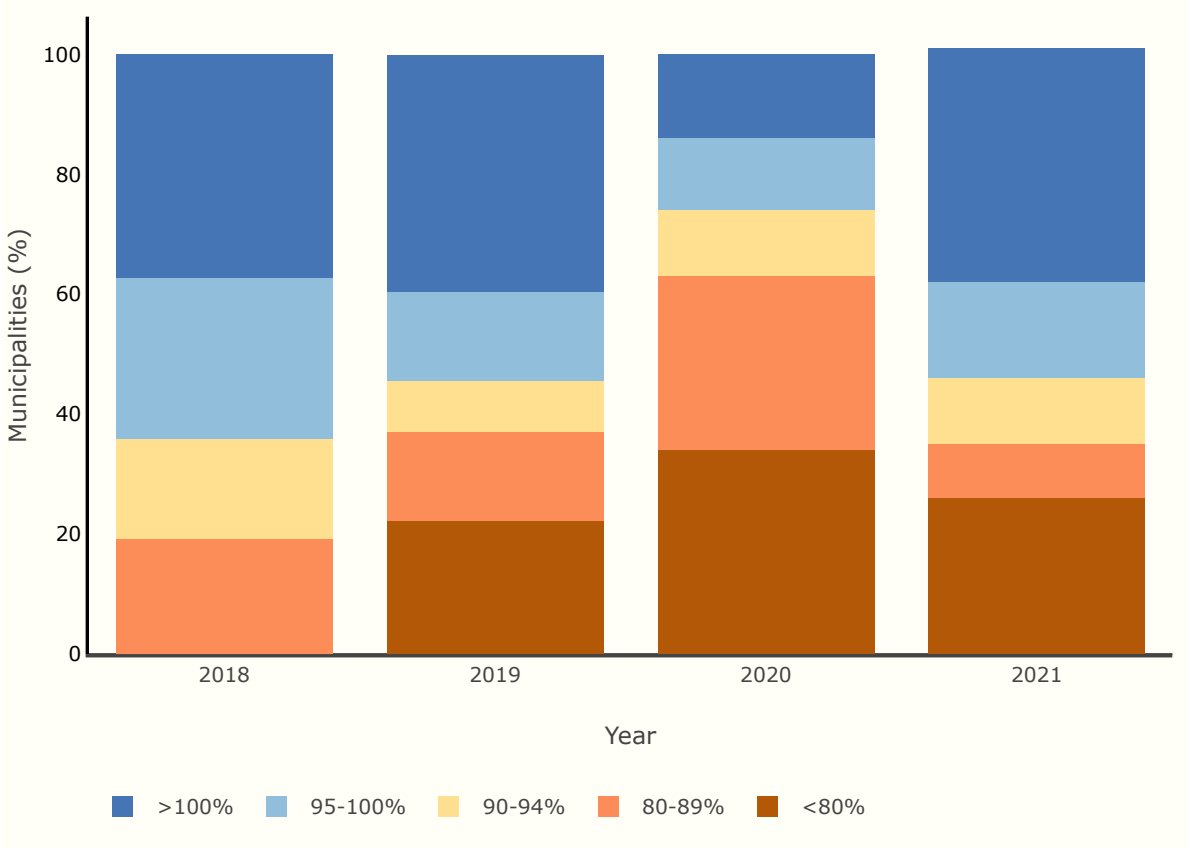


Figure 12: Proportion of children living in those municipalities for MMR1 vaccination coverage ranges, 2018-2022.

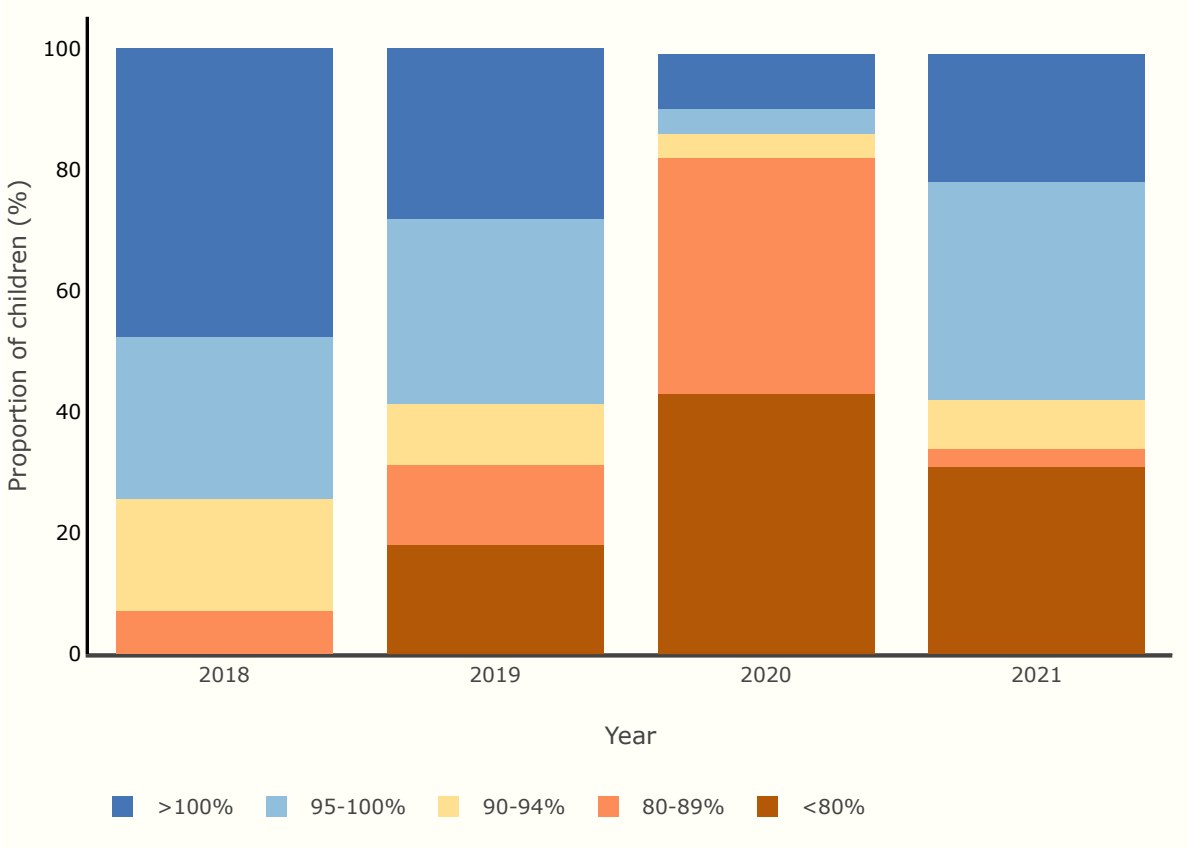


Figure 13: Proportion of municipalities by MMR2 vaccination coverage ranges, 2018-2022.

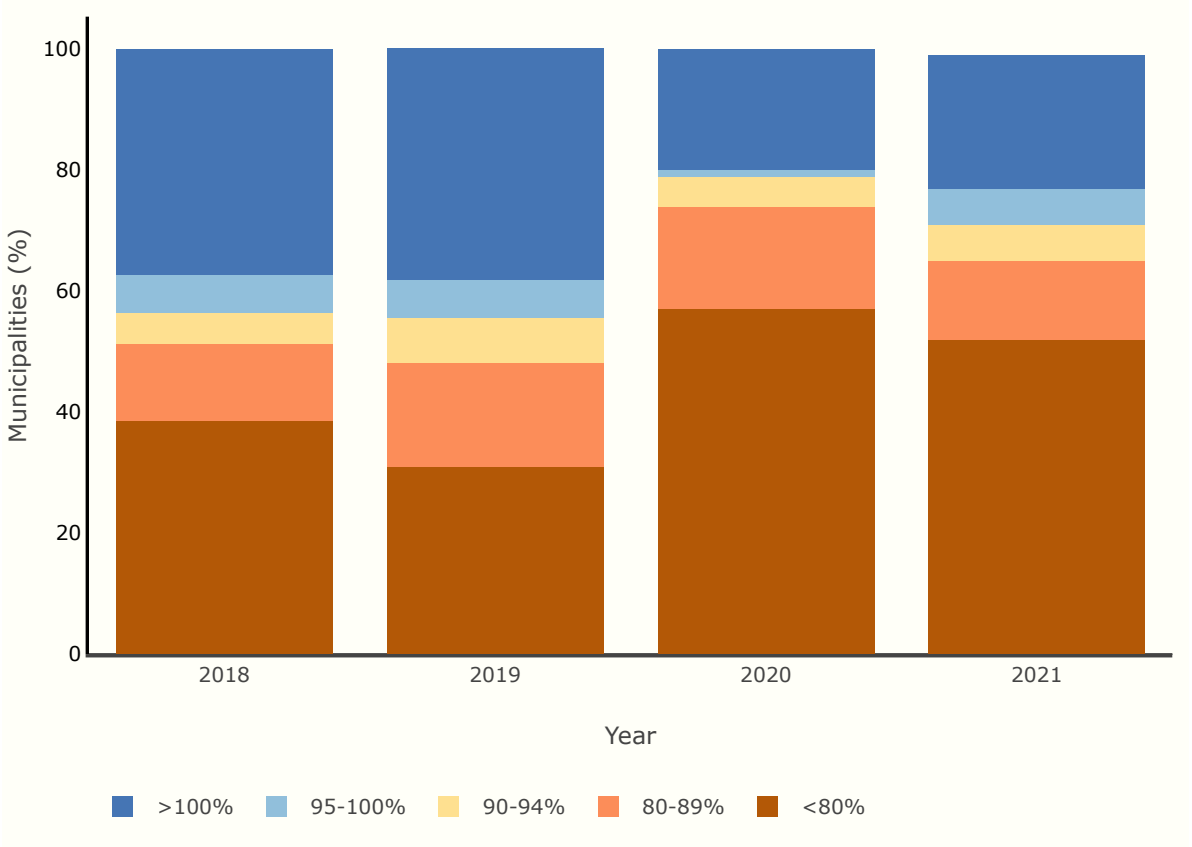


Figure 14: Proportion of children living in those municipalities for MMR2 vaccination coverage ranges, 2018-2022.

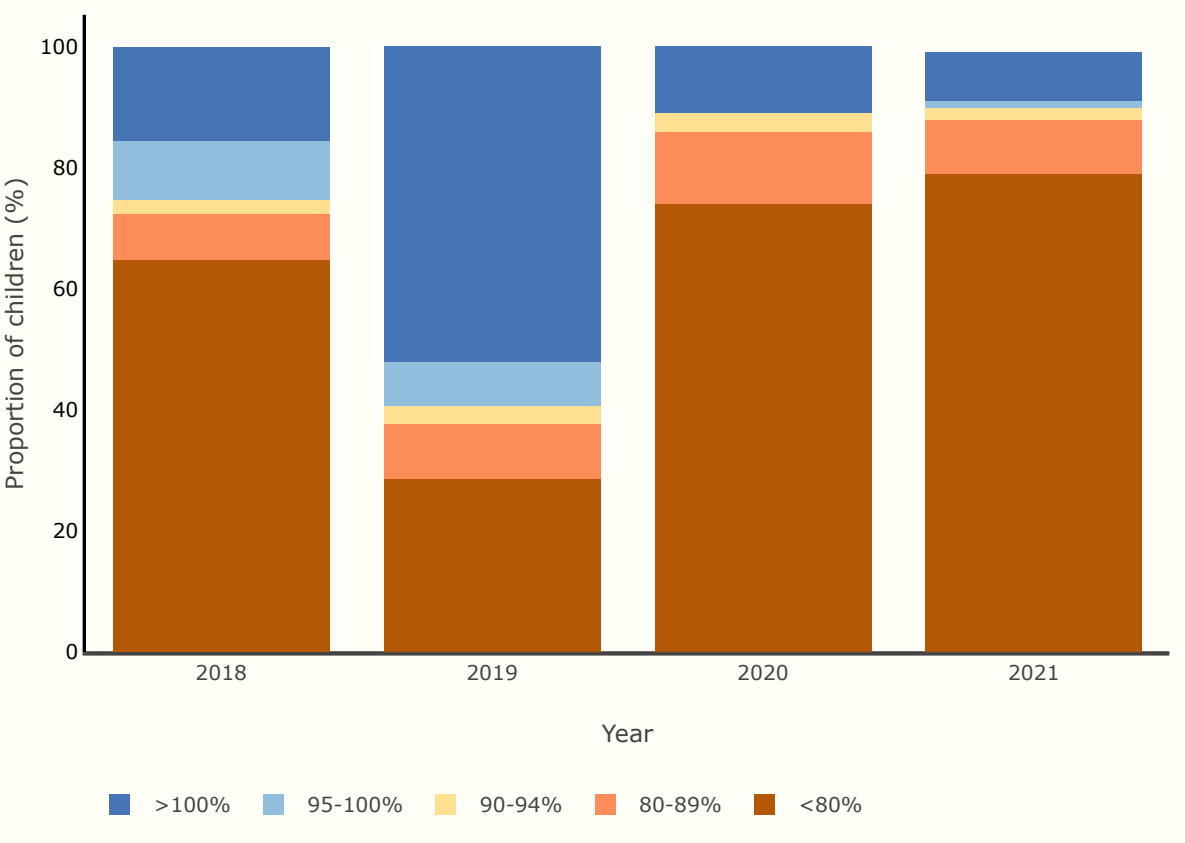


Table 11: Proportion of municipalities with MMR1 and MMR2 coverage ranges and proportion of children living in those municipalities, 2018-2022.

		MMR1		MMR2	
Year	Coverage range (%)	MMR1	MMR2	MMR1	MMR2
2022	<80	NA	NA	NA	NA
2022	80-89	NA	NA	NA	NA
2022	90-94	NA	NA	NA	NA
2022	95-100	NA	NA	NA	NA
2022	>100	NA	NA	NA	NA
2021	<80	26.0	52.0	31.0	79.0
2021	80-89	9.0	13.0	3.0	9.0
2021	90-94	11.0	6.0	8.0	2.0

2021	95-100	16.0	6.0	36.0	1.0
2021	>100	39.0	22.0	21.0	8.0
2020	<80	34.0	57.0	43.0	74.0
2020	80-89	29.0	17.0	39.0	12.0
2020	90-94	11.0	5.0	4.0	3.0
2020	95-100	12.0	1.0	4.0	0.0
2020	>100	14.0	20.0	9.0	11.0
2019	<80	22.2	30.9	18.0	28.6
2019	80-89	14.8	17.3	13.3	9.1
2019	90-94	8.6	7.4	10.1	3.0
2019	95-100	14.8	6.2	30.5	7.2
2019	>100	39.5	38.3	28.1	52.1
2018	<80	0.0	38.5	0.0	64.9
2018	80-89	19.2	12.8	7.2	7.6
2018	90-94	16.7	5.1	18.5	2.2
2018	95-100	26.9	6.4	26.7	9.8
2018	>100	37.2	37.2	47.6	15.5

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 Reporting Form (eJRF).
Epidemiology and Quality of Surveillance	[3] Integrated Surveillance Information System (ISIS) and country reports to CIM/PAHO. [2] Country reports through the electronic PAHO-WHO/UNICEF Joint Reporting Form (eJRF).
Laboratory Surveillance	[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).