

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

Ecuador

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	296,506
Total population	18,001,028

Table 2: Last endemic cases by year and disease.

Measles	Rubella	CRS
1996	2004	2002

Table 3: Vaccination schedule.

Vaccine	1st Dose	2nd Dose	MMR2 Year Introduced
MMR	12 mo	18 mo	2015

Epidemiology and Quality of Surveillance

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

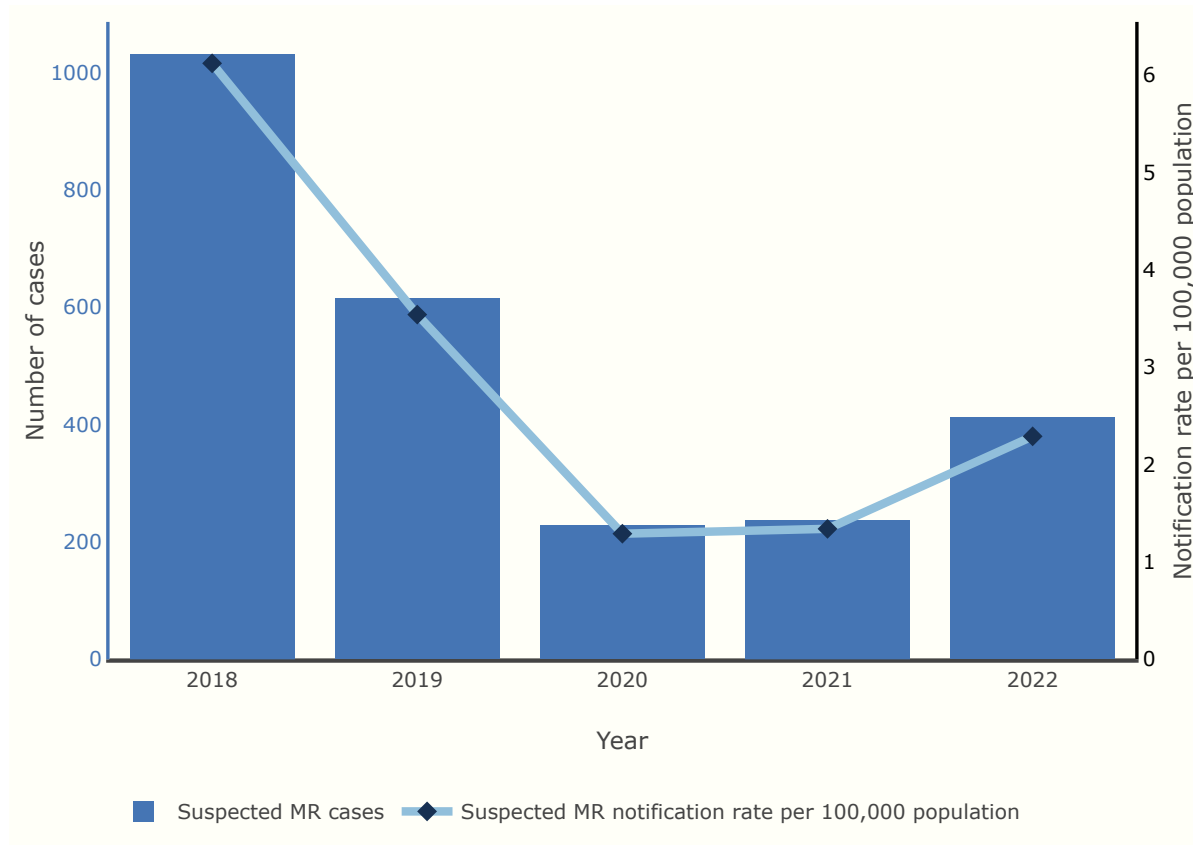


Table 4: Distribution of suspected MR cases and notification rate at the national level, 2018-2022.

	2018	2019	2020	2021	2022
Suspected MR cases	1,032	615	228	238	412
Suspected MR notification rate per 100,000 population	6.12	3.54	1.29	1.34	2.29

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

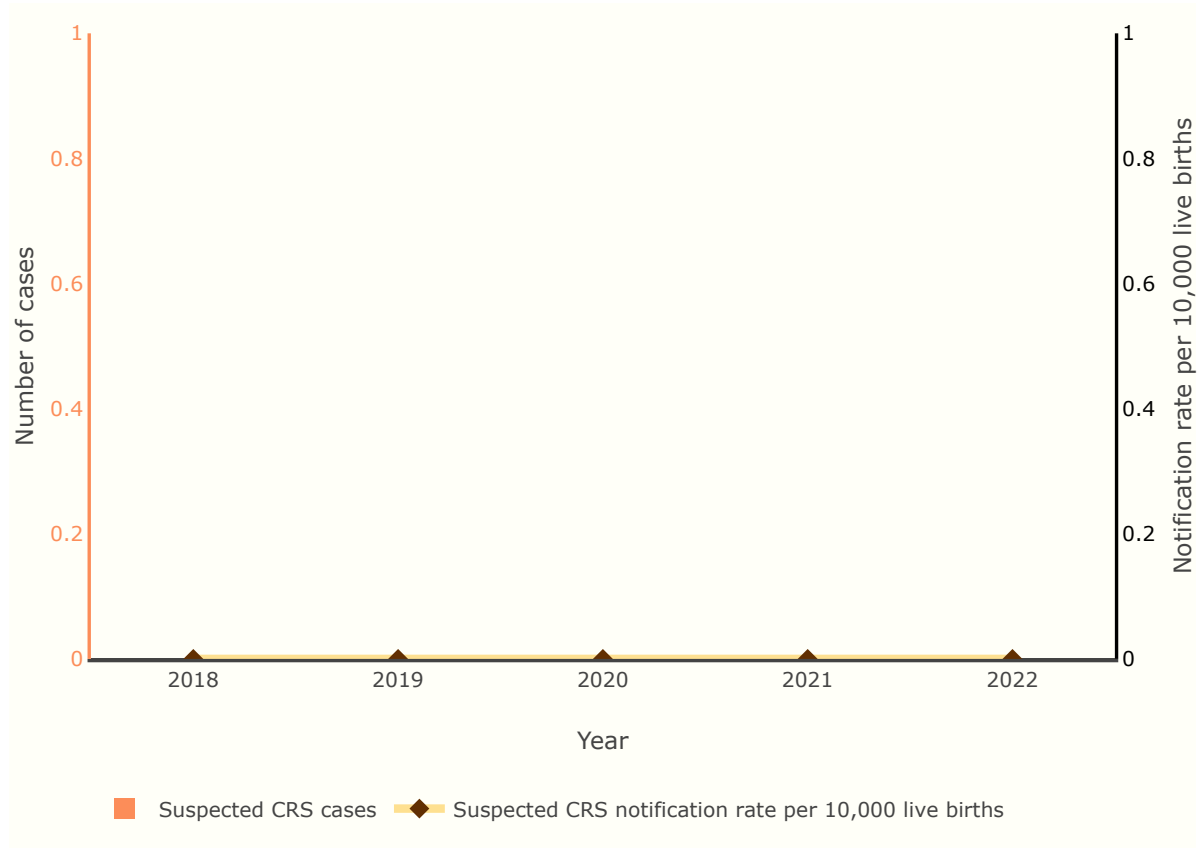


Table 5: Distribution of suspected CRS cases and notification rate at the national level, 2018-2022.

	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

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

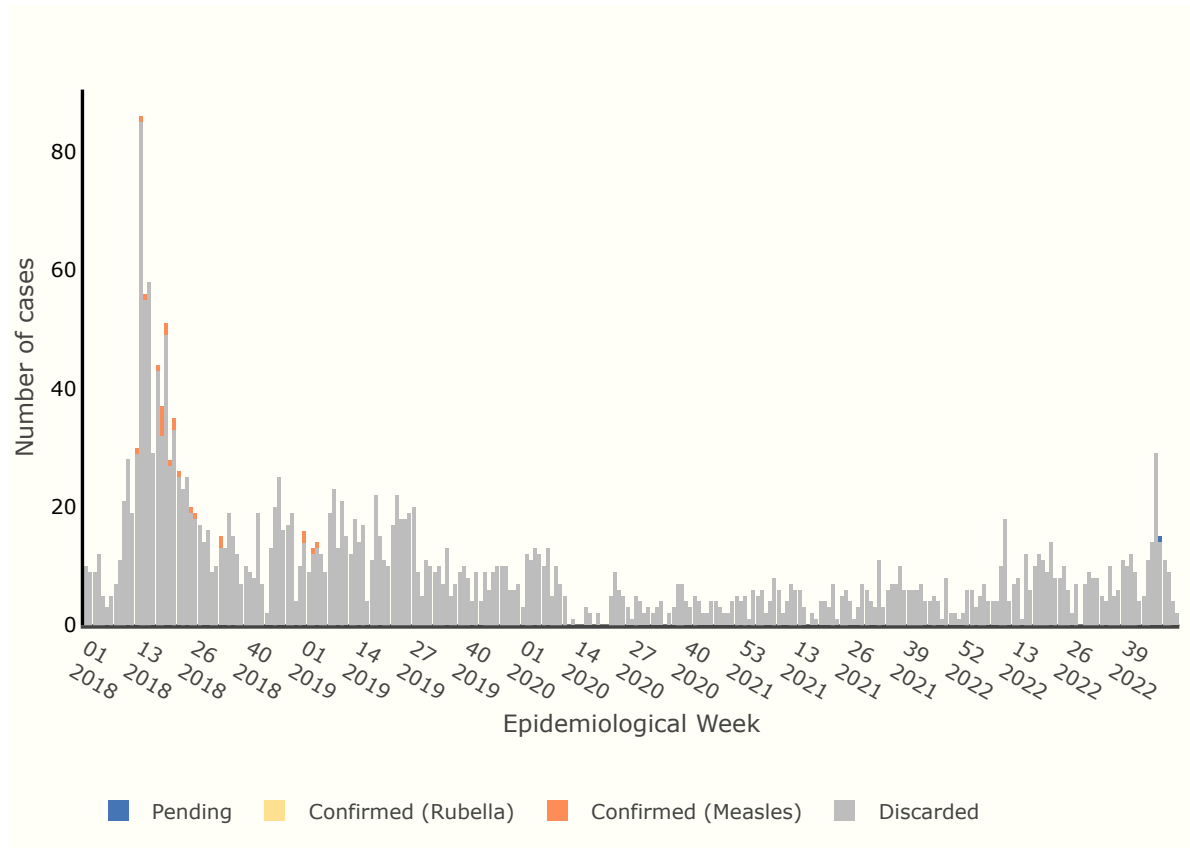


Figure 4: Number of measles and rubella cases by epidemiological year pending final classification, 2018-2022.

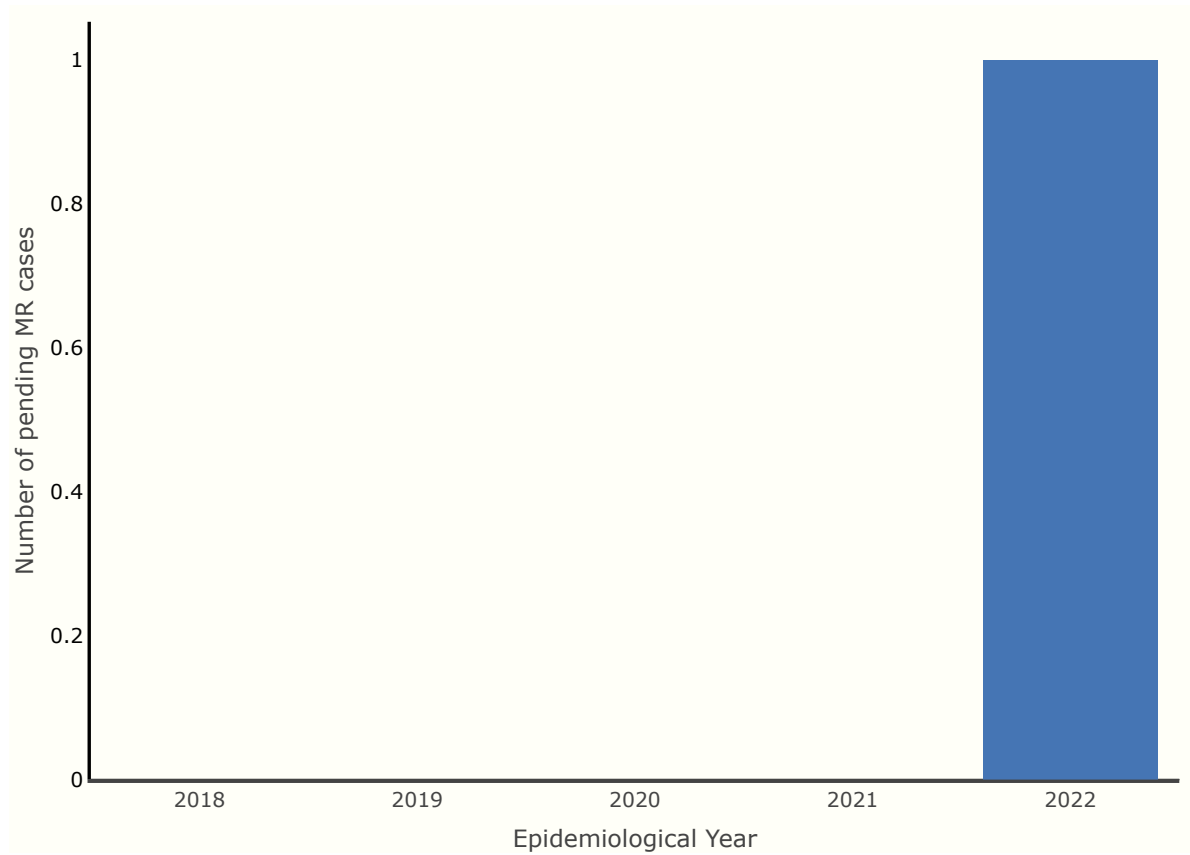


Table 6: Reported cases of measles and rubella by epidemiological year and final classification, 2018-2022.

Classification	2018	2019	2020	2021	2022
Confirmed (Measles)	19	4	0	0	0
Confirmed (Rubella)	0	0	0	0	0
Pending	0	0	0	0	1
Discarded	1013	611	228	238	411
Total	1032	615	228	238	412

Figure 5: Distribution of reported measles and rubella cases and incidence rate by age group, 2018-2022.

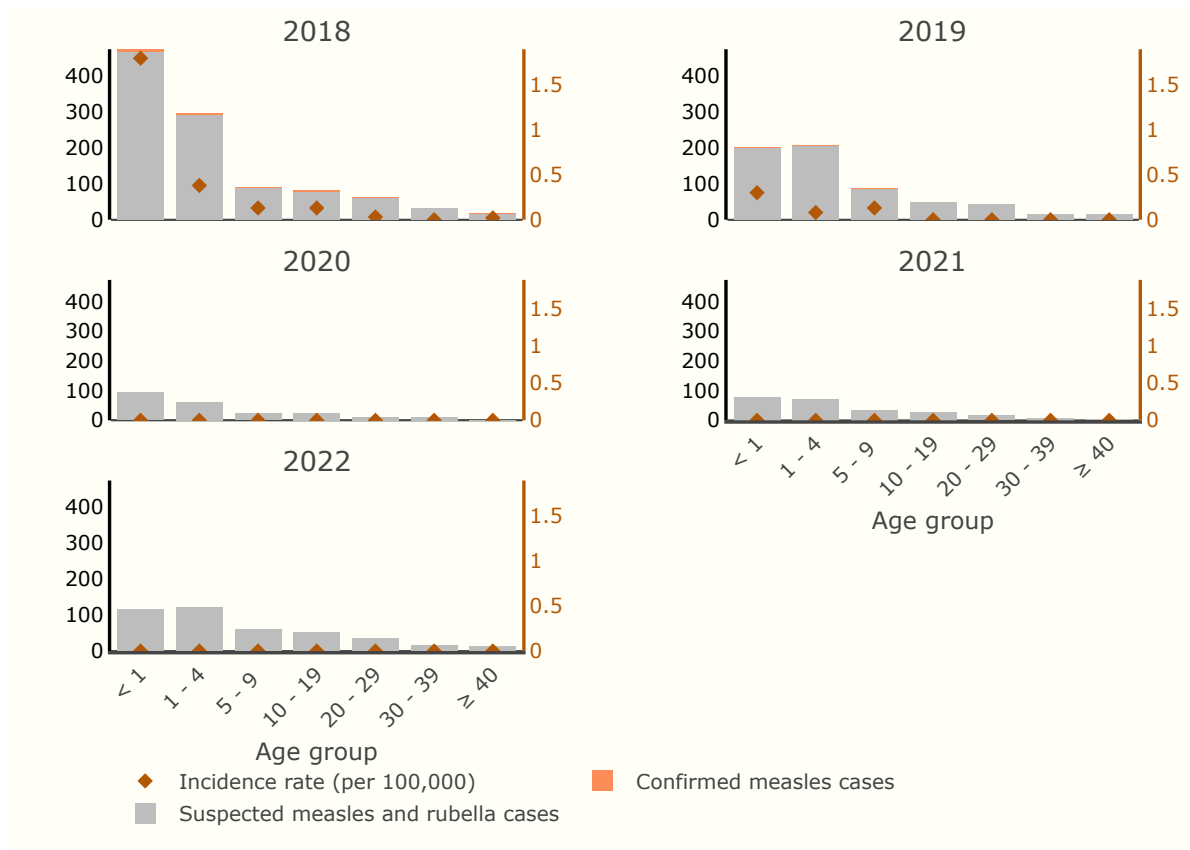


Figure 6: Performance indicators of measles and rubella surveillance by year, 2018-2022.

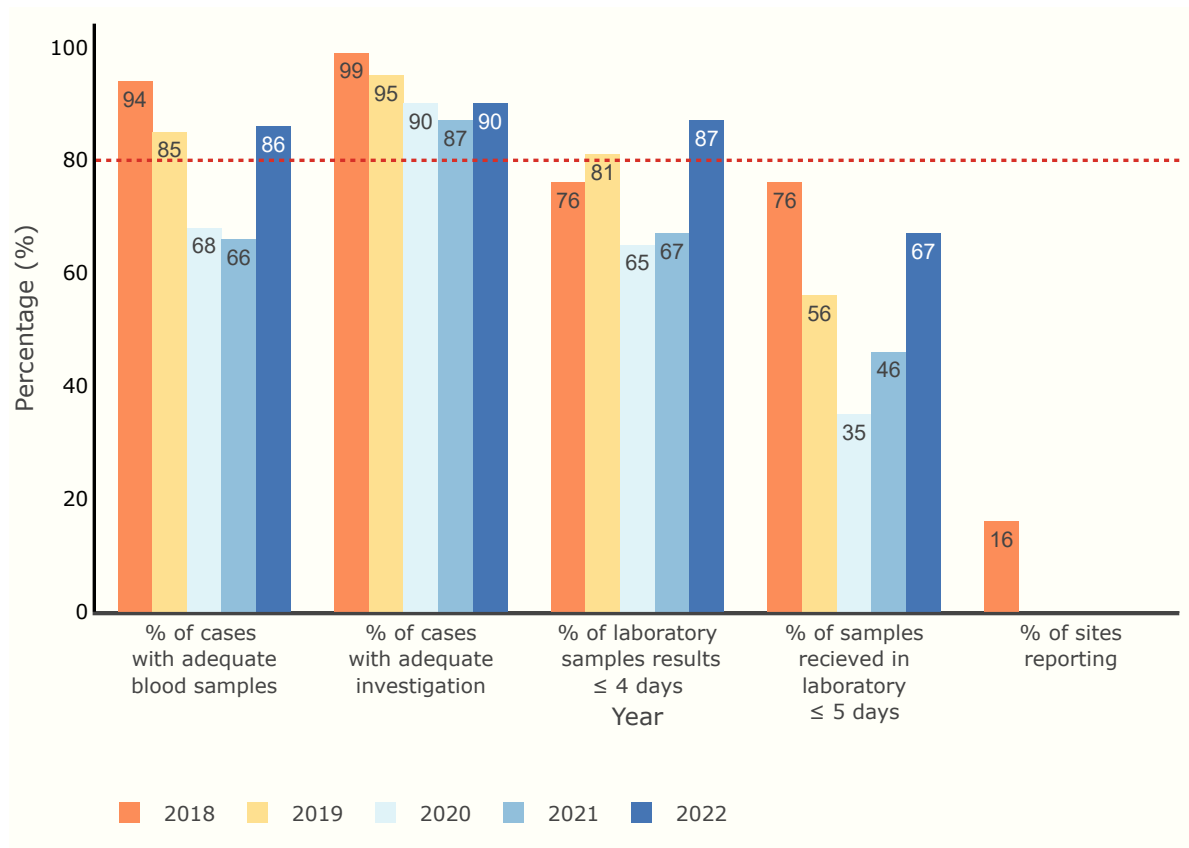


Figure 7: Proportion of the 11 variables reported for adequate investigation indicator, 2022.

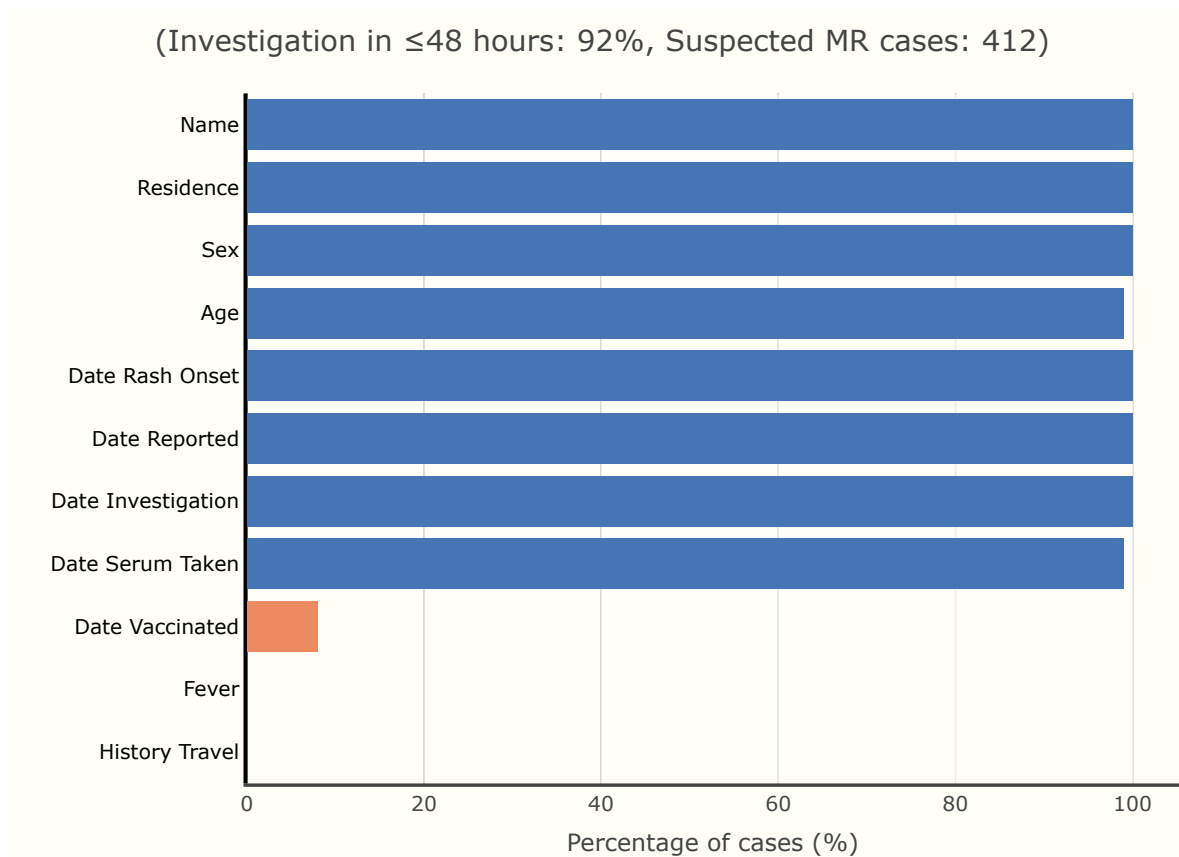


Table 7: Municipalities reporting measles and rubella suspected cases by year, 2018-2022.

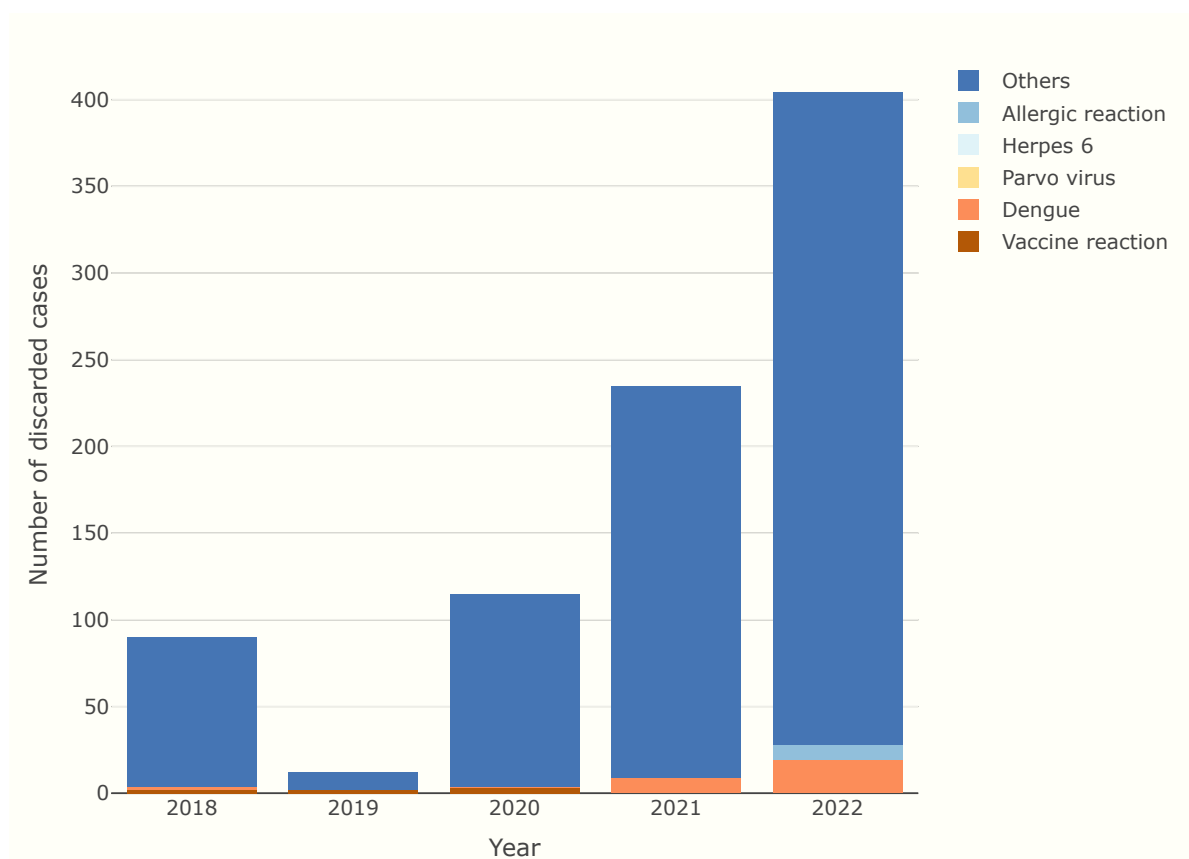
Year	No. of municipalities reporting suspected cases	Total municipalities in the country	% of municipalities reporting suspected cases
2018	114	221	52
2019	55	221	25
2020	46	221	21
2021	61	221	28
2022	93	221	42

Laboratory Surveillance

Table 8: 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	1032	1013	922	1	90	2	2	0	0	0	86
2019	615	611	599	0	12	2	0	0	0	0	10
2020	228	228	111	2	115	3	1	0	0	0	111
2021	238	238	2	1	235	0	9	0	0	0	226
2022	412	411	7	0	404	0	19	0	0	9	376

Figure 8: Distribution of discarded measles and rubella suspected cases by other differential diagnosis, 2018-2022.



Analysis of Vaccination Coverage and Population Cohorts

Figure 9: Coverage of the first dose of measles-mumps-rubella (MMR1) vaccine, number of doses administered, and number of children 1 year of age, 2018-2022.

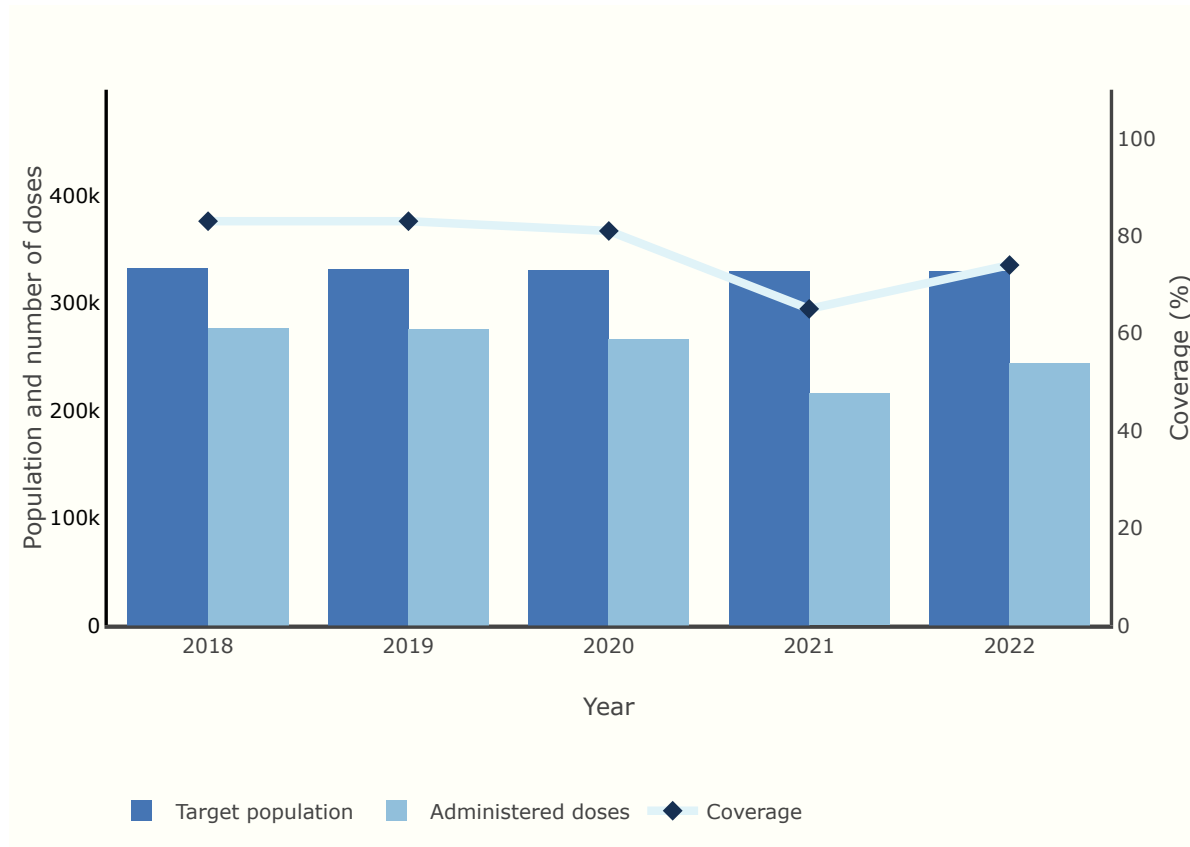


Figure 10: Coverage of the second dose of measles-mumps-rubella (MMR2) vaccine, number of doses administered, and number of children 18 month(s) of age, 2018-2022.

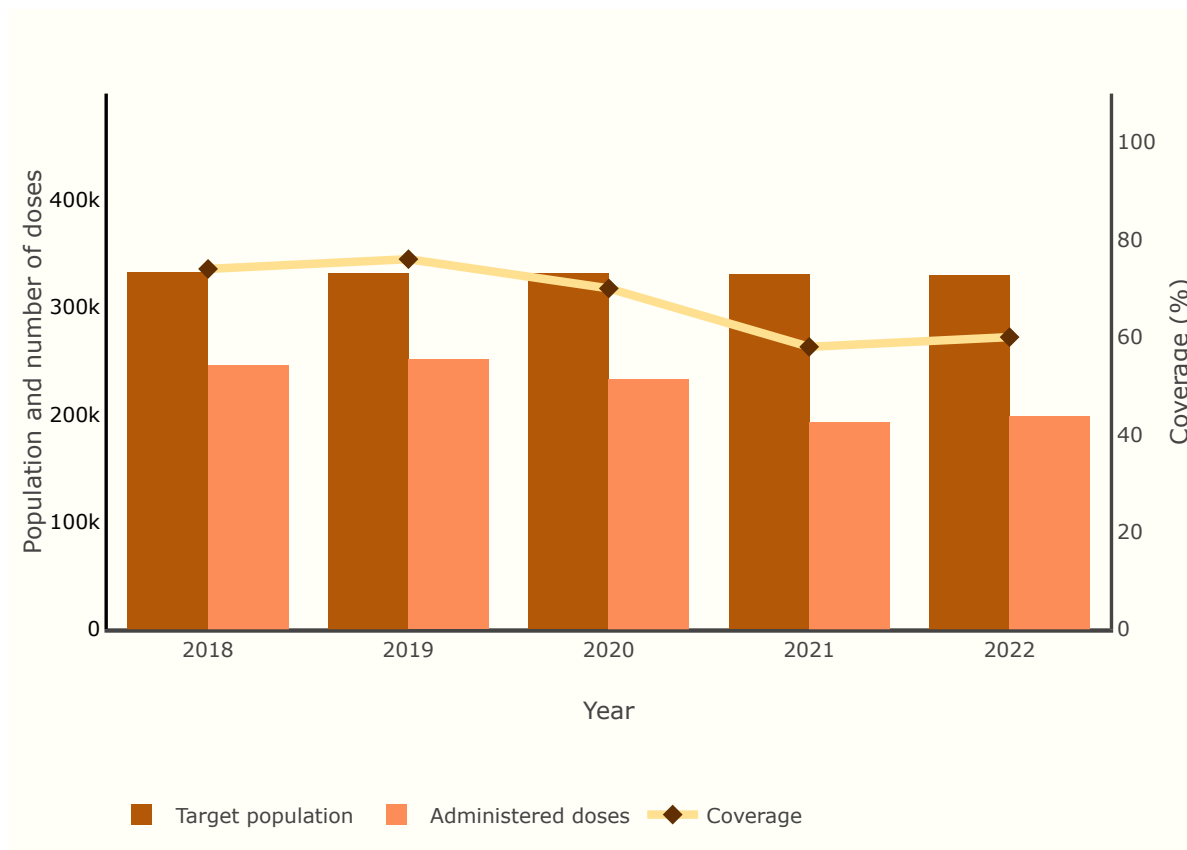


Table 9: Vaccination coverage with first and second dose of measles-mumps-rubella (MMR1 and MMR2) vaccines by target population and administered doses, 2018-2022.

Year	MMR1			MMR2		
	Administered doses	Target population	Coverage	Administered doses	Target population	Coverage
2018	276,814	332,461	83	245,983	332,461	74
2019	276,289	331,669	83	250,964	331,669	76
2020	266,550	331,025	81	232,883	331,025	70
2021	215,874	330,345	65	192,835	330,345	58
2022	243,905	329,725	74	198,598	329,725	60

Figure 11: Subnational coverage of the first dose of measles-mumps-rubella (MMR1) vaccine and proportion of children aged 1 year, 2021

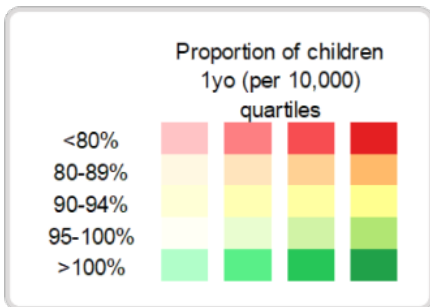
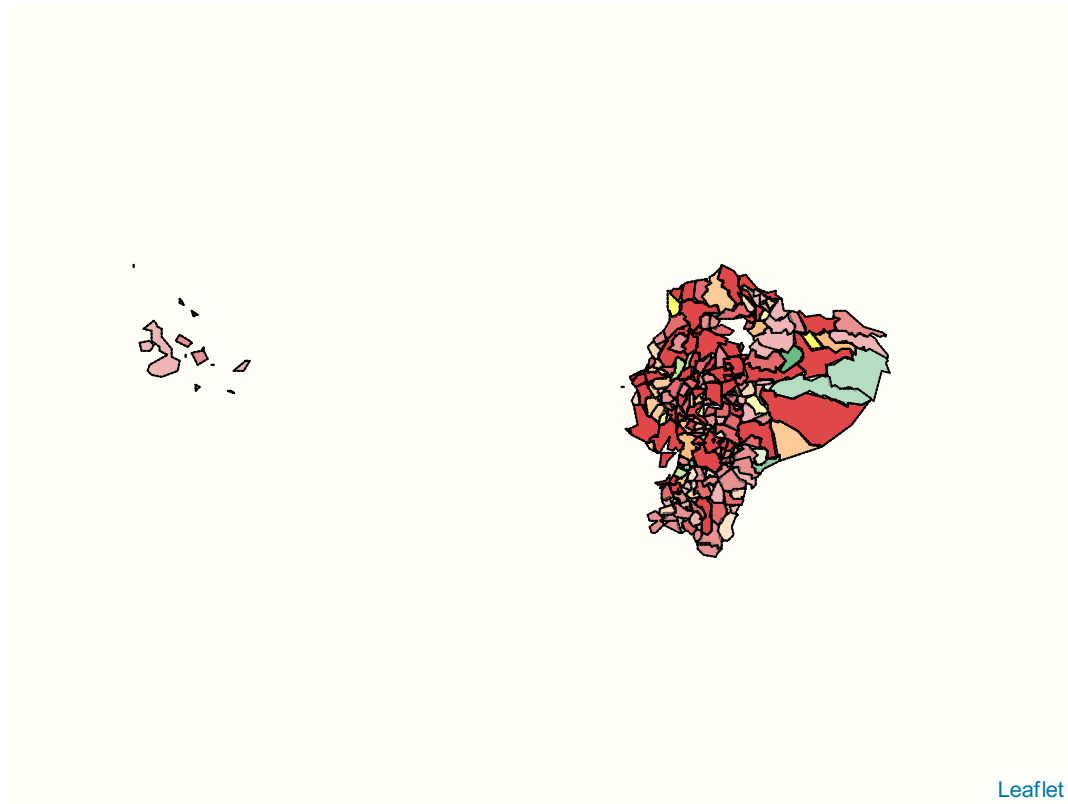


Figure 12: Proportion of municipalities by MMR1 vaccination coverage ranges, 2018-2022.

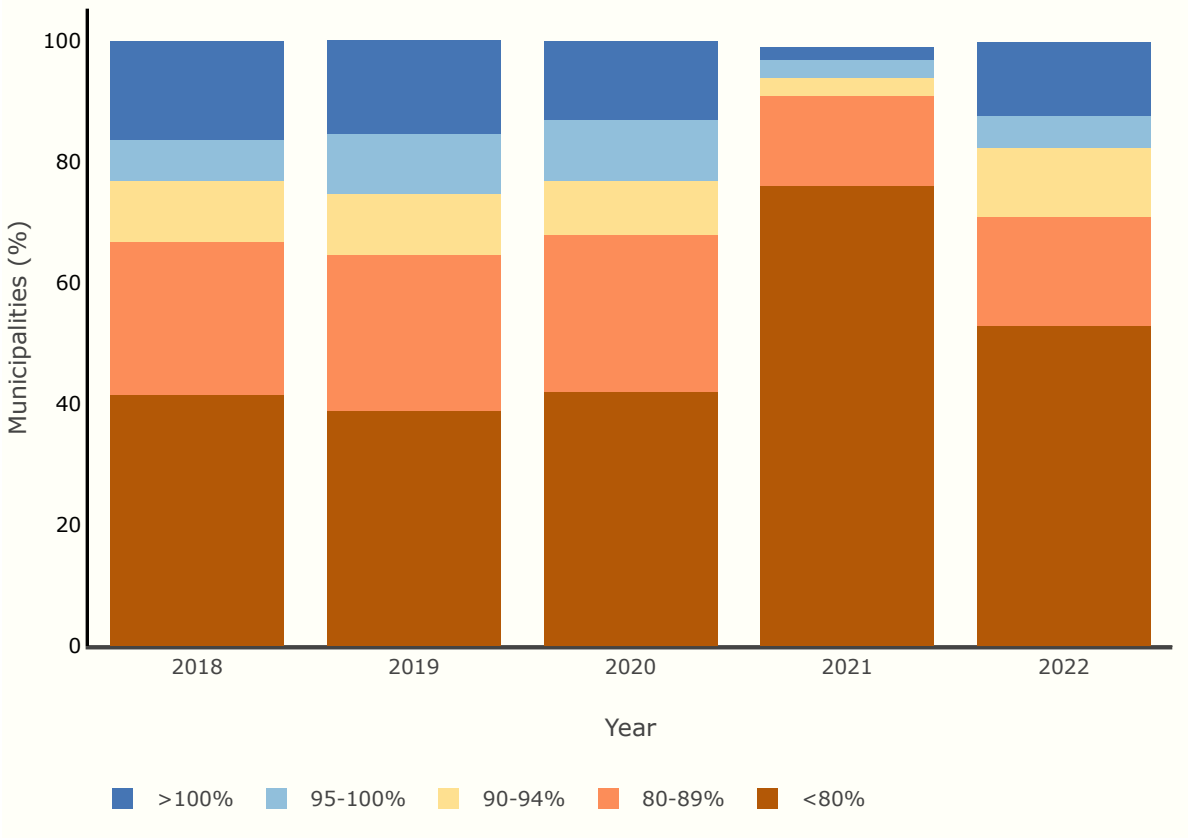


Figure 13: Proportion of children living in those municipalities for MMR1 vaccination coverage ranges, 2018-2022.

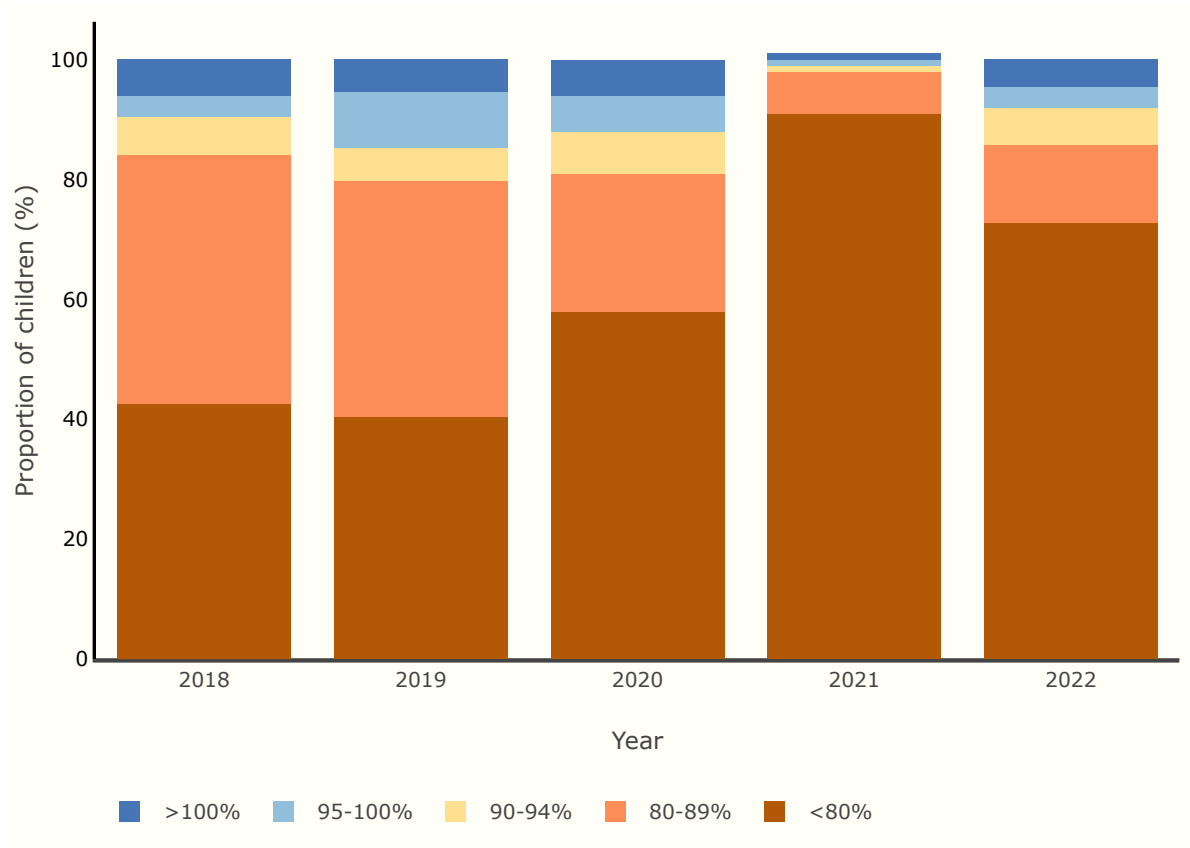


Figure 14: Proportion of municipalities by MMR2 vaccination coverage ranges, 2018-2022.

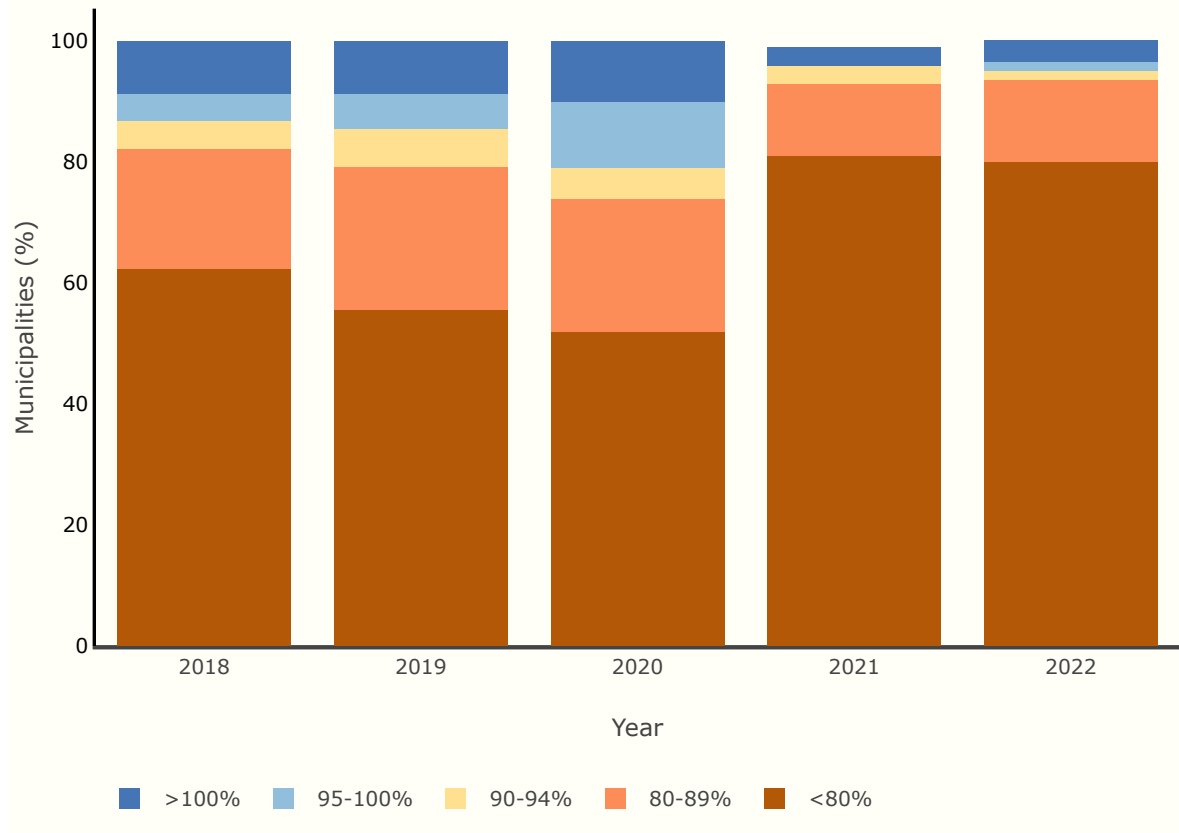


Figure 15: Proportion of children living in those municipalities for MMR2 vaccination coverage ranges, 2018-2022.

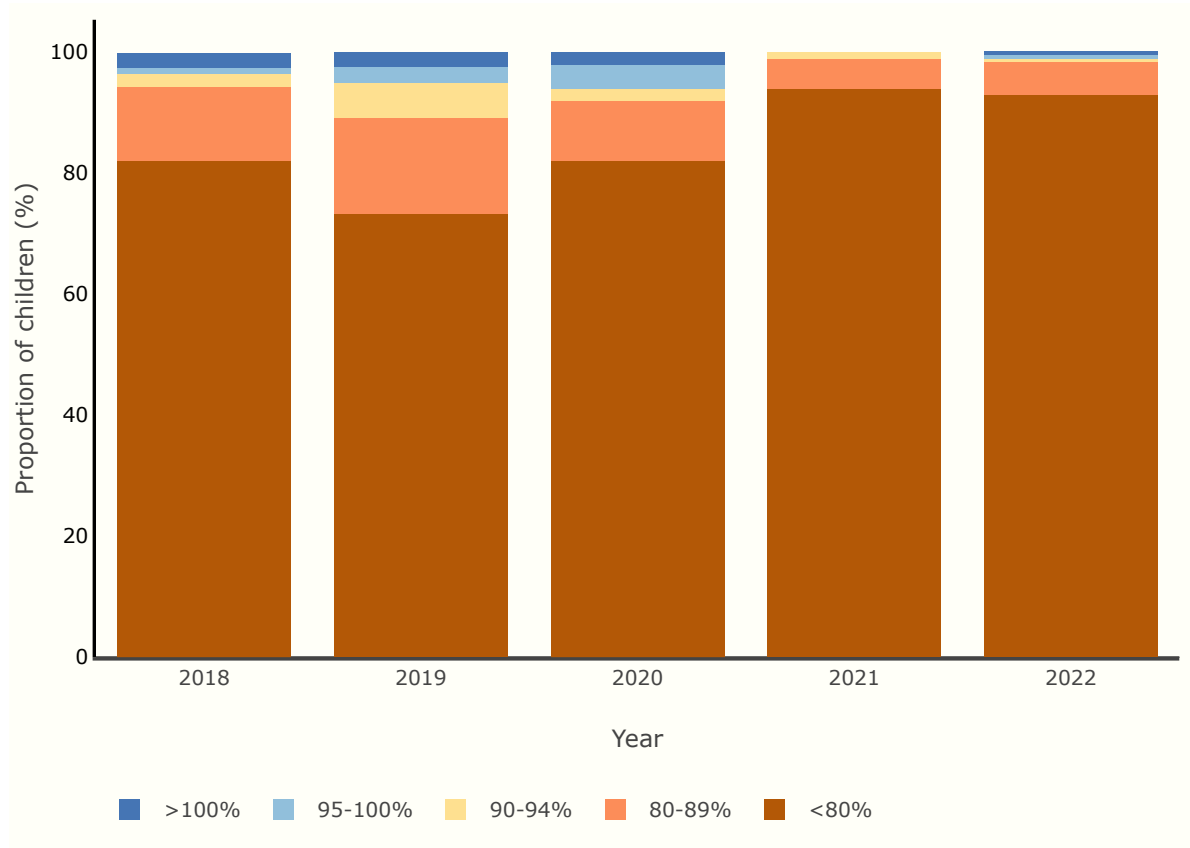


Table 10: Proportion of municipalities with MMR1 and MMR2 coverage ranges and proportion of children living in those municipalities, 2018-2022.

Year	Coverage range (%)	MMR1		MMR2	
		MMR1	MMR2	MMR1	MMR2
2022	<80	52.9	80.1	72.8	93.0
2022	80-89	18.1	13.6	13.0	5.4
2022	90-94	11.3	1.4	6.1	0.5
2022	95-100	5.4	1.4	3.5	0.6
2022	>100	12.2	3.6	4.6	0.6
2021	<80	76.0	81.0	91.0	94.0
2021	80-89	15.0	12.0	7.0	5.0
2021	90-94	3.0	3.0	1.0	1.0

2021	95-100	3.0	0.0	1.0	0.0
2021	>100	2.0	3.0	1.0	0.0
2020	<80	42.0	52.0	58.0	82.0
2020	80-89	26.0	22.0	23.0	10.0
2020	90-94	9.0	5.0	7.0	2.0
2020	95-100	10.0	11.0	6.0	4.0
2020	>100	13.0	10.0	6.0	2.0
2019	<80	38.9	55.7	40.5	73.3
2019	80-89	25.8	23.5	39.3	15.8
2019	90-94	10.0	6.3	5.5	5.9
2019	95-100	10.0	5.9	9.3	2.6
2019	>100	15.4	8.6	5.4	2.4
2018	<80	41.6	62.4	42.7	82.0
2018	80-89	25.3	19.9	41.4	12.3
2018	90-94	10.0	4.5	6.3	2.2
2018	95-100	6.8	4.5	3.5	1.0
2018	>100	16.3	8.6	6.1	2.4

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).
