Immunization in the Americas

2015 Summary

Comprehensive Family Immunization Family, Gender and Life Course





Pan American Health Organization



World Health Organization

REGIONAL OFFICE FOR THE Americas

preface

The Decade of Vaccines and the *Global Vaccines Action Plan* (GVAP) envision a world in which all individuals and communities enjoy life free of vaccine-preventable diseases. The Region of the Americas has ratified its commitment to achieving this by promoting the adoption of the *Plan of Action on Immunization*, which shares the vision described in the GVAP. However, given the particular characteristics of the Region, it is also crucial to emphasize the importance of universal and equitable access to immunization services that offer safe, effective, and affordable vaccines throughout the life course.

The Region has focused its efforts on using vaccination as a catalyst to strengthen health systems, while at the same time achieving the goal of eliminating vaccine-preventable diseases. This year, 2015, marks an important milestone: the Region of the Americas was declared by the International Expert Committee as the first region in the world free from the endemic transmission of the rubella virus and congenital rubella syndrome. With this achievement, the goal of eliminating measles in the Region has become even more urgent.

The Region was certified as polio-free in 1994, but in order to reach the global goal of polio eradication, the countries of the Hemisphere still face the challenge of switching from the trivalent oral polio vaccine (tOPV) to the bivalent oral vaccine (bOPV) against polio types 1 and 3 only, since no circulation of wild poliovirus type 2 has been reported in the world since 1999. To ensure that this switch is accomplished safely, effectively, and without setbacks, the countries are expected to plan and implement the recommended actions on a timely basis, thus reducing the risk of emerging cases of vaccine-derived polio virus (cVDPV).

Vaccination coverage is the principal indicator of how immunization programs are performing and what advances have been made toward the objectives of the GVAP and the *Plan of Action on Immunization*. Nevertheless, the data provided by the countries gives cause for concern as reduced coverage rates are being observed. For this reason, PAHO encourages the countries to step up their efforts to ensure universal and equitable access to vaccination, as well as to use quality vaccination data, in order to support effective actions from the local to the regional level and improve decision-making processes and program management at all levels.

We know that there is still work to be done to achieve the Decade of Vaccines vision of a world in which everyone benefits from vaccination regardless of where they were born or where they live. We rely on the ongoing commitment and collective will of the Member States, communities, and our many partners. This commitment, coupled with the unconditional dedication of health workers, will ensure that the immunization goals will continue to be met. I call upon you to continue working together and to "go for more."

Carissa F. Etienne Director

Pan American Health Organization

For this publication:

- Latin America is composed of Mexico, Central American Isthmus, Latin Caribbean, Andean Area, Brazil, and Southern Cone.
- Latin America & Caribbean is composed of Latin America and Non-Latin Caribbean.
- Because of their population size, Brazil and Mexico are shown separately.

The data published in the brochure "Immunization in the Americas" may have been updated by the countries, after publication. To see the most up-to-date data, please visit: www.paho.org/immunization/Data.

demographic and socioeconomic data

	1	2	3		4		5	6	7	8	9	10
	total population (thousands)	population < 5 years old (thousands)	annual births average (thousands)		fant mortalit (1,000 lb) mber of deat	or	women of childbearing age (thousands)	gross national income (US\$ per capita) current ppp value value		GINI index (latest available)	as a ^c public	olth expenditure % of GDP private expenditure
	2014	2014	2014	rate	(N)	year	2014	2013	2013		2013	2013
The Americas	981,557	76,920	15,597.6	15.0	153,606		250,270					
North America	358,178	22,967	4,643.6	6.9	25,441	2012	82,999	104 /10	// 420d			
Bermuda Canada United States of America	70 35,525 322,583	2,012 20,951	0.8 400.4 4,242.4	4.6 5.5 7.0	1,810 23,629	2013 2011 2012	15 8,220 74,764	104,610 ^d 52,210 53,470	66,430 ^d 42,120 53,750		7.6 8.1	3.1 f 9.1
Latin America and the Caribbean	623,380	53,952	10,954.0	18.9	128,165		167,272					
Latin America	616,063	53,361	10,834.3	18.9	126,359		165,358					
Mexico	123,799	11,179	2,235.2	15.7	29,229	2013	34,368	9,940	16,020	48 ^d	3.2	3.0
Central American Isthmus Belize Costa Rica El Salvador Guatemala Honduras Nicaragua Panama	45,877 340 4,938 6,384 15,860 8,261 6,169 3,926	5,376 39 366 628 2,287 1,005 681 369	1,117.9 7.8 73.6 127.6 485.8 210.1 137.6 75.3	22.6 14.4 9.4 11.0 24.8 29.0 25.0 19.1	17,610 88 575 1,102 7,221 5,289 b 2,229 b,6	2014 2014 2014 2013 2012 2011 2013	12,106 93 1,329 1,819 3,992 2,177 1,686 1,009	4,510 9,550 3,720 3,340 2,180 1,790 10,700	7,870 13,570 7,490 7,130 4,270 4,510 19,300	49 ^d 42 ^d 52° 57°	3.4 7.4 4.6 2.4 4.3 4.5 4.9	2.0 2.5 2.3 4.1 4.4 3.9 2.3
Latin Caribbean Cuba Dominican Republic French Guiana Guadeloupe Haiti Martinique Puerto Rico	37,061 11,259 10,529 255 468 10,461 405 3,684	3,143 529 1,059 28 32 1,250 22 223	646.3 105.9 215.5 6.0 6.1 264.3 4.5 44.0	47.9 5.7 28.3 12.8 88.0 	5,579 514 4,692 53° 50 270	2014 2014 2011 2013 2012 2009-11 2013	9,525 2,810 2,741 66 114 2,768 97 930	5,890° 5,770 810 	11,630 1,720 23,840	 46 ^d 	9.6 ct 2.8 0.7	2.7 8.7
Andean Area Bolivia	137,380 10,848	13,259 1,294	2,705.1 276.4	18.6	20,029		36,381 2,764	2,550	5,750	47 ^d	4.8	1.3
Colombia Ecuador Peru Venezuela	48,930 15,983 30,769 30,851	4,478 1,604 2,925 2,957	903.1 327.6 597.9 600.2	19.8 17.8 17.3	8,220 ^b 2,928 8,881	2012 2013 2010-14 2012	13,151 4,174 8,182 8,109	7,590 5,760 6,270 12,550	11,960 10,720 11,160 17,900	54 ^d 47 ^d 45 ^d	5.2 3.9 3.1	1.6 3.6 2.2
Brazil	202,034	14,743	2,979.5	16.5	42,108	2013	55,219	11,690	14,750	53 ^d	4.7	5.0
Southern Cone Argentina Chile Paraguay Uruguay	69,912 41,803 17,773 6,918 3,419	5,662 3,426 1,221 771 243	1,150.5 693.5 245.1 162.7 49.1	12.1 12.6 8.1 17.0 9.0	11,804 8,174 1,692 1,562 376	2013 2013 2013 2014	17,758 10,557 4,592 1,787 822	15,230 4,010 15,180	21,060 7,670 18,940	44° 51° 48 ^d 41 ^d	4.9 3.7 3.5 6.1	2.4 4.1 5.5 2.6
Non-Latin Caribbean Anguilla	7,316 16	591 1	119.7 0.2	15.6 33.3	1,806 2	0 2014	1,914 4					
Antigua and Barbuda Aruba Bahamas Barbados BES*	91 111 383 290	7 7 29 17	1.5 1.4 5.8 3.5	18.2 1.8 22.8 14.2	13 2 101° 37	2014 2012 2012 2013	26 27 105 74	13,050 21,570 15,080 ^d	20,490 22,700 15,090 d		3.1 3.2 4.1 0.0	1.7 4.1 2.6 0.0
Cayman Islands Curaçao Dominica Grenada Guyana Jamaica Montserrat Saint Kitts & Nevis Soint Lucia St. Vincent and the Grenandines Sint Maarten (Dutch part) Suriname Tinidad and Tobago	55 148 73 110 804 2,799 5 52 163 103 40 544 1,344	3 10 6 9 80 243 0 4 11 7 3 47	0.7 2.0 1.1 1.8 16.0 50.0 0.1 0.7 2.3 1.4 0.5 9.5	4.2 12.3 20.8 14.3 23.3 15.2 17.4 7.6 17.5 14.5	3 23 17 23 345 775 - 15 30 28 3 147 225	2014 2012 2014 2014 2014 2011 2014 2014	14 33 19 27 205 743 2 14 44 26 10 141 350	6,930 7,490 3,750 5,220 13,890 7,060 6,460 9,370 15,760	10,060 11,230 6,610 8,490 20,990 10,290 10,440 15,960 26,220		4.2 3.0 4.3 3.4 2.3 4.7 4.3 3.4 2.6	1.8 3.3 2.2 2.5 4.1 3.8 0.9 1.4 2.8
Turks and Caicos Virgin Islands (UK) Virgin Islands (US)	49 33 104	4 2 6	0.8 0.4 1.1	6.9 3.5	3 1 13	2014 2014 2012	15 10 24					

^{*} Bonaire, St. Eustatius, and Saba.

reported immunization coverage

	BCG 2014	12 polio3 2014	13 < DTP1 2014	14 T year of age DTP3 + Hib3 2014	15 percentage of co DTP1-3 Dropout Rate 2014	16 overage rotavirus 2014	17 - PCV3 2014	18 1 y DTP4 2014	19 ear of age MMR1 2014	20 MMR2k 2014	21 % of municipa- lities w/ cove- rage level ≥95% DTP3 2014	22 total number of districts/ municipalities 2014
The Americas	95	90	95	90		81	88	81	92	86	43	15,189
North America Bermuda Canada United States of America	NA	93 99 96 ^d 93 ^d	98 99 98 ^d	94 99 96 ^d 94 ^{d,f}	0.0 	73 NA NA 73	91 91 77 ^d 92	83 97 ⁹ 83	92 84 95 ^d 92 ^d	92 92 ^g	0 	64 NA 13 ¹ 51 ^m
Latin America and the Caribbean	95	88	93	88		84	87	80	93	86	43	15,125
Latin America	95	88	93	88		84	87	80	92	86	42	14,967
Mexico	96	87		87		85	94	90	98	96	26	2,456
Central American Isthmus Belize Costa Rica El Salvador Guatemala Honduras Nicaragua Panama	90 98 80 85 91 86 100°	79 95 91 93 65 85 100°	91 96 91 96 89 86 100 96	83 95 91 94 73 85 100° 80	1.4 0.2 2.3 17.7 1.4 -0.8 16.0	74 NA NA 96 54 85 100	72 NA 83 86 51 85 100 °	75 82 80 92 56 89 97	82 95 95 95 67 88 100 ^c 90	88 92 90 85 NA NA NA	36 67 36 48 21 26 75 24	1,213 6 81 262 334 298 153 79
Latin Caribbean Cuba Dominican Republic French Guiana Guadeloupe Haiti Martinique Puerto Rico	85 99 100° 67 	85 100° 90 75	87 98 100 71	79 100° 91 60 	-4.4 13.3 15.5 	61 NA 86 NA NA 40 NA	27 27 NA 	85 100 ° 78 g g NA g	79 100 ° 87 g g g g	100 100 ° NA g g NA g	51 92 42 14	463 168 155 140
Andean Area Bolivia Colombia Ecuador Peru Venezuela	92 96 89 89 94 95	84 85 90 84 78	91 94 91 84 98 88	86 85 90 83 88 78	9.4 1.2 1.3 10.0 11.5	84 85 89 81 86 76	86 56 89 100° 86	66 28 90 70 67 46	87 86 91 70 89	67 NA 88 85 44 50	25 20 25 14 26 28	3,886 339 1,122 221 1,838 366
Brazil	100°	96	95	94	7.3	92	93	86	100°	92	61	5,570
Southern Cone Argentina Chile Paraguay Uruguay	96 100° 98 77 99	90 92 95 74 95	95 98 99 78 99	91 94 95 74 95	4.0 4.2 5.3 4.7	72 NA NA 72 NA	87 89 92 71 95	82 84 90 61	92 95 97 73 96	90 96 88 64 93	51 60 39 15 83	1,379 511 345 245 278
Non-Latin Caribbean Anguilla Antigua and Barbuda Aruba Bahamas, The Barbados BES* Cayman Islands Curaçao Dominica Grenada Guyana Jamaica Montserrat Saint Kitts & Nevis Saint Lucia St. Vincent and the Grenadines Sint Maarten (Dutch part) Suriname Trinidad and Tobago Turks and Caicos Islands Virgin Islands (UK)	91 100° NA NA NA 62 79 NA ^d 98 NA 99 90 100° NA NA NA NA NA	93 100° 96 97 95 97 97 98 81 97 93 100° 96 99 97 95 85	93 100 100 96 98 100 97 ^d 99 97 100 90 98 99 100 100 96 91 93 93 82	93 100° 100° 96 94 97 95 97 97 98 92 100° 98 99 99 98 95 85 92	-3.7 0.8 3.2 3.4 1.0 -1.2 3.7 -1.8 -29.3 5.7 2.1 7.9 7.5 0.9 2.9	72 NA NA NA 10 NA 76 NA	63 NA NA NA 96 90 94 NA	81 85 g 74 g 85 g 93 93 NA 85 96 97 85 97 85 97 85 97 96 64 75 82 70 g	94 100° 100° 92 95 86 93 ^d 94 100 92 100° 93 100° 100° 98 85 96 98 90	76 89 100 72 91 9 66 90 89 92 91 72 100 90 90 79 98 85 18 93 88 76 9	56 100 73 53 45 67 86 57 38 31 100 88 67 67 100 0	158 3 15 16 11 6 7 7 13 13 4 17 9 9 1 10 9 4 4

⁽a) <2 years of age; (b) children aged 19-35 months; (c) reported coverage > 100%; (d) value 2013; (e) polio 2, as per country schedule; (f) DTP3, Hib not included; (g) no data but in schedule; (h) coverage report for measles-rubella vaccine in children < 1 year of age; (k) target age groups vary by country; (l) reports number of provinces and territories; (m) reports number of states.

morbidity data

	23	24	25	26	27	28 number	29 of reported cas	30 ses	31	32	33	34
		confirmed	cases		neonatal	tet	anus (non-nea	nata l)			Hib	
	wild polio	measles ^a	rube ll a	CRS	tetanus	male	female	total	pertussis	diphtheria	meningitis	mumps
	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014
The Americas	0	1,817	8	1	10	388	100	504	31,767	10	184	18,114
North America	0	1,085	5	1	0	3	3	22	19,400	2	61	1,000
Bermuda Canada	0	0	0	0	0	0	0 3	0	0 1,527	0	0 21	0 40
United States of America	0	418 667	4	0 1				6 16	17,873	1	40 °	960
Latin America and the Caribbean	0	732	3	0	10	385	97	482	12,367	8	123	17,114
Latin America	0	732	3	0	10	383	97	480	12,354	8	123	17,114
Mexico	0	3	0	0	1	4	22	26	955	0	0	4,143
Central American Isthmus	0	1	0	0	0	14	4	18	119	0	13	545
Belize	0	0	0	0	0	0	0	0	3	0	0	0
Costa Rica	0	1	0	0	0	0	1	1	31	0	9	0
El Salvador Guatemala	0	0	0	0	0	5 2	0	6 2	0 25	0	0	257 0
Honduras	Ö	Ö	Ö	Ő	Ö	6	2	8	41	0	ì	136
Nicaragua	0	0	0	0	0	1	0	1	0	0	1	44
Panama	0	0	0	0	0	•••	•••	0	19	0	2	108
Latin Caribbean	0	0	0	0	3	36	10	46	100	3	12	1,784
Cuba Dominican Republic	0	0	0	0	0	1 35	0 10	1 45	0 98	0	11 1	0 1,784
French Guiana	Ö											
Guadeloupe	0			-11								
Haiti Martinique	0	0	0	0	3	0	0	0	2	3	0	0
Puerto Rico	0		0	0								
Andean Area	0	0	0	0	5	77	17	94	1,055	0	35	9,545
Bolivia	Ö	Ö	0	0	0	0	0	0	75	0	3	586
Colombia	0	0	0	0	2	48	11	59	734	0	28	7,368
Ecuador Peru	0	0	0	0	0	2 20	0 1	2 21	9 236	0	1	1,522
Venezuela	Ö	Ő	Ö	0	2	7	5	12	1	Ö	2	69
Brazil	0	727	1	0	1	235	37	272	8,338	5	0	0
Southern Cone	0	1	2	0	0	17	7	24	1,787	0	63	1,097
Argentina	0	i	2	0	0	5	3	8	561	0	49	87
Chile	0	0	0	0	0	4	3	7	1,125	0	9	863
Paraguay Uruguay	0	0	0	0	0	7	1 0	8 1	101	0	1 4	147 0
			-	-		'		·				
Non-Latin Caribbean Anguilla	0	0	0	0	0	2	0	2	13 0	0	0	0
Antigua and Barbuda	0	0	0	0	0			0	0	0	0	0
Aruba	0											
Bahamas, The Barbados	0	0	0	0	0	0	0	0	0	0	0	0
BES*	0										0	0
Cayman Islands	0	0	0	0	0	0	0	0	0	0	0	0
Curaçao Dominica	0	0	0	0			0		0	0	0	0
Grenada	0	0	0	0	0	0	0	0	0	0	0	0
Guyana	0	0	0	0	0	0	0	0	0	0	0	0
Jamaica Montserrat	0	0	0	0	0	2	0	2	0	0	0	0
Saint Kitts & Nevis	0	0	0	0	0	0	0	0	0	0	0	0
Saint Lucia	Ö	Ö	Ö	0	0			0	0	0	0	0
St. Vincent and the Grenadines	0	0	0	0	0	0	0	0	0	0	0	0
Sint Maarten (Dutch part) Suriname	0	0	0	0	0	0	0	0	0 13	0	0	0
Trinidad and Tobago	0	0	0	0	0			0	0	0	0	0
Turks and Caicos Islands	0	0	0	0	0			0	0	0	0	0
Virgin Islands (UK) Virgin Islands (US)	0	0	0	0	0	0	0	0	0	0	0	0
virgin Islanas (US)	U	•••	•••	•••		•••	•••	•••		•••	•••	•••

 $^{^{*}}$ Bonaire, St. Eustatius, and Saba.

⁽a) imported or related to importation; (b) invasive disease (Age <5 years); (c) Morbidity and Mortality Weekly Report (MMWR), July 31, 2015/Vol. 64/No.29.

program management and financing

	35 years covered by multi-year plan for immunization	36 number of NITAG meetings	37 number of districts with at least 1 supervisory visit	38 plan for immunization injection safety	39 national system to monitor ESAVIs	40 spending on routine immunization financed using gov't funds (%)	41 spending on vaccine purchases financed using gov't funds (%)	42 budget line for vaccine purchases
		2014	2014	2014	2014	2014	2014	2014
The Americas								
North America Bermuda Canada United States of America		4 4	4 	no 	yes 	98 	100	yes
Latin America and the Caribbean								
Latin America								
Mexico	2013-2018	3	32 ^a	no	yes	100	100	yes
Central American Isthmus Belize Costa Rica El Salvador Guatemala Honduras Nicaragua Panama	2013 - 2018 2015-2020 2013-2014 2011-2015 2015(2016-2020) 2019	 4 12 3 1	4 262 250 153 14	yes yes yes yes yes	yes no yes yes yes yes	99 100 100 99 79 75 87	100 100 100 100 73 67 100	yes yes yes yes yes yes
Latin Caribbean Cuba Dominican Republic French Guiana Guadeloupe Haiti Martinique Puerto Rico	2014-2018 2011-2015 	3 	168 	yes no yes 	yes yes yes 	100 94 	99 94 	yes yes
Andean Area Bolivia Colombia Ecuador Peru Venezuela	2010-2015 2010-2016 2015-2019 2015-2020	6 4 3 5 2	1122 20	yes yes no yes yes	yes yes yes yes	95 100 100 100	93 100 100 100	yes yes yes
Brazil	2012-2015	2		yes	yes	100	100	yes
Southern Cone Argentina Chile Paraguay Uruguay	2011-2016 2010-2020 2014 2015-2020	3 7 4 4	138 15 ^b 238 278	yes yes yes yes	yes yes yes yes	100 100 100 100	100 100 100 100	yes yes
Non-Latin Caribbean Anguilla Antigua and Barbuda Bahamas Barbados BES* Cayman Islands Curaçao Dominica Grenada Guyana Jamaica Montserrat Saint Kitts & Nevis Saint Lucia St. Vincent and the Grenandines Sint Maarten (Dutch part) Suriname Tinidad and Tiboago Turks and Caicos Virgin Islands (UK)	2013-2014 2010-2020 2013-2018 2015 2016-2018 2015	 0 4 4 6	3 34 9 2 7 4 13 13 13 4 0 5 9 1 0	yes no yes yes yes yes yes yes yes yes yes no yes yes no	yes yes yes yes no yes yes yes yes yes yes yes yes yes no yes yes yes no yes	100 99 99 100 82 92 91 99 4 95 91 94 100 98 	100 99 100 100 100 100 82 100 100 100 100 100 100 100 100 100 100	yes

^{*}Bonaire, St. Eustatius, and Saba. (a) *entidades federativas*; (b) regions.

surveillance indicators

Acute Flaccid Paralysis (AFP), 2014

Country	Number of AFP cases	AFP rate (x 100,000 pop <15 years old)	% of cases investigated within <48 hours	% of cases with 1 adequate sample	Total Number of sites	% Sites reporting
Argentina Bolivia Brazil Canada CARPHA Chile Colombia Costa Rica Cuba Dominican Republic Ecuador El Salvador Guatemala Haiti Honduras Mexico Nicaragua Panama Paraguay Peru Uruguay	214 41 444 28 10 71 166 18 10 19 22 64 31 21 60 599 28 14 16 58 3	2.11 1.07 0.94 0.5 0.5 1.84 1.29 1.61 0.52 0.6 0.44 3.5 0.73 0.54 1.89 1.73 1.39 0.73 0.54	52 95 95 95 60 58 25 56 100 11 55 6 71 25 99 82 64 50 57 50	83 79 69 7 60 83 81 94 80 78 68 88 61 52 90 80 100 71 63 62	625 3,059 3,392 500 314 5,326 70 165 236 2,181 1,227 220 191 449 320° 185 232 999 7,731 155	87 83 95 72 99 93 100 49 70 60 67 90 100 75 81 88
United States of America Venezuela	NR 64	0.26 NR 0.75	NR 97	NR 88	NR 13,092	NR
TOTAL/AVERAGE	2,001	1.19	74	76	40,669	

(a) value 2013.

Source: Integrated Surveillance Information System (ISIS), Polio Eradication Surveillance System (PESS), and country reports to FGL-IM/PAHO.

Measles/Rubella Surveillance Indicators, 2014

Country	Number of suspect cases	% of cases with adequate investigation	% of cases with adequate samples	% of samples received in lab ≤5 days	% of lab samples results ≤4 days	Rate of suspected MR cases/100,000 population	Rate of suspected CRS cases/10,000 live births
Argentina	484	17	94	58	39	1.2	0.9
Bolivia	157	99	97	75	94	1.6	0.0
Brazil	6,625		73	73	51	0.0	0.2
CARPHA	492	43	83	12	86	6.6	1.4
Chile	268	34	72	80	86	1.6	0.0
Colombia	2,818	74	95	90	97	5.9	5.2
Costa Rica	44	57	84	77	68	1.0	0.0
Cuba	1,151	100	100	100	100	10.3	0.0
Dominican Republic	61	7	77	67	69	0.6	0.0
Ecuador		:	···	:::		0.0	0.0
_ El Salvador	496	67	94	82	72	8.0	3.8
French Guiana	0		•••			0.0	0.0
Guadeloupe	0	· <u>· · · · ·</u>	<u> </u>	:::	2:2	0.0	0.0
Guatemala	243	7	94	61	78	1.7	0.1
Haiti	123	90	98	89	77	1.2	0.5
Honduras	288	41	97	71	70	3.9	0.4
Martinique	1 1					0.0	0.0
Mexico	4,925	99	98	88	82	4.5	0.0
Nicaragua	144	95	97	95	94	2.5	1.6
Panama	216	96	97	84	90	6.3	0.1
Paraguay	337	77	97	95	89	5.3	0.3
Peru	423	86	89	75	40	1.5	0.0
Uruguay	10	90	80	88	75	0.3	0.0
Venezuela	758	89	97	68	56	2.7	0.0
TOTAL/AVERAGE	20,064	81	88	80	72	3.6	0.7

Source: Integrated Surveillance Information System (ISIS), Measles Elimination Surveillance System (MESS), and country reports, FGL-IM/PAHO.

technical notes and data sources

Main Data Sources

For detailed information on demographic data and socioeconomic indicators, please visit: www.paho.org/datastatistics.

Demographic data: United Nations, Population Division. World Population Prospects: The 2012 Revision, New York; 2013. Accessed 15 June 2015 (http://esa.un.org/wpp/). U.S. Bureau of the Census. International Data Base. December 2013 Release. Accessed 15 June 2015 (http://www.census.gov/ipc/www/idb/). Women of childbearing age includes women aged 15 to 49 years.

Infant mortality rate (1,000 lb) or number of deaths (N): As reported or estimated by countries. Infant mortality rate as reported by the country (ECU, ELS, GTM, GUY, PRY, TRT) presents limitations due to the coverage of deaths of infants < 1 year or the number of live births. For some countries due to the small number of events, the rate does not meet standards for reliability and precision and number of deaths are presented. An increase in infant mortality rate may reflect an improvement in data coverage and quality.

Socioeconomic indicators: The World Bank. 2015 World Development Indicators. Washington DC; 2015. 15 June 2015 Update. The estimates of the national health expenditure) corresponds to the WHO National Health Accounts estimates. For more information: WHO Health expenditures database, http://apps. who.int/nha/database/DocumentationCentre/Index/en

Immunization coverage, immunization program management, and financing information: Annual country reports to Comprehensive Family Immunization Unit (IM)/PAHO via PAHO-WHO/UNICEF Joint Reporting Form (JRF); 2015.

Morbidity: Annual country reports to IM/PAHO via JRF, vaccine-preventable disease specific surveillance reports for measles/rubella and polio; 2014-2015.

Surveillance indicators: Vaccine-preventable disease specific surveillance reports for measles/rubella and acute flaccid paralysis/polio to IM/PAHO; 2014-2015.

Symbols and Abbreviations

(pop) population; (Ib) live births; (NA) not applicable; (...) not available; (ppp) purchase power parity; (int'1) international; (GDP) gross domestic product; (BCG) bacille Calmette-Guérin (anti-tuberculosis vaccine); (Polio3) third dose of polio vaccine (oral polio vaccine or inactivated; polio vaccine); (DTP1) first dose of diphtheria-tetanus-pertussis vaccine (as DTP or combination vaccine); (DTP3-Hib3) third dose of diphtheria-tetanus-pertussis-Haemophilus influenzae type b (Hib) vaccine (as DTP-Hib or other combination vaccine); (Rotavirus) last dose of rotavirus vaccine; (PCV3) third dose of pneumococcal conjugate vaccine; (DTP4) first booster dose after the primary series consisting of three doses of diphtheria-tetanus-pertussis vaccine (as DTP or combination vaccine); (MMR1) first dose of measles, mumps, rubella vaccine; (MMR2) second dose of measles, mumps, rubella vaccine (when

offered in the routine program; (CRS) congenital rubella syndrome; (Hib) Haemophilus influenzae type b; (NITAG) national immunization technical advisory group; (ESAVI) event supposedly attributable to vaccination or immunization; (gov't) government; (Hi) Haemophilus influenzae; (Spn) Streptococcus pneumoniae; (Nm) Neisseria meningitidis; (m) months.

Country codes: (ARG) Argentina; (BOL) Bolivia; (BRA) Brazil; (CARPHA) Caribbean Public Health Agency; (CHL) Chile; (COL) Colombia; (DOM) Dominican Republic; (ECU) Ecuador; (SLV) El Salvador; (GTM) Guatemala; (GUY) Guyana; (HTI) Haiti; (HND) Honduras; (NIC) Nicaragua; (PAN) Panama; (PRY) Paraguay; (PER) Peru; (SUR) Suriname; (VCT) St. Vincent and the Grenadines; (VEN) Venezuela.

Technical Notes

Immunization coverage: Proportion of children aged <1 year vaccinated with one dose of BCG vaccine, the third dose of polio vaccine (oral polio vaccine or inactivated polio vaccine), the first dose of DTP, the third dose of DTP and Hib, the last dose of rotavirus vaccine (2^{nd} or 3^{rd} dose depending on the vaccine used) and the third dose of PCV, respectively. Proportion of children aged 1 year vaccinated with the first booster of DTP vaccine, and one dose of MMR vaccine, as targeted in countries offering a second MMR dose in the routine program. Coverage rates are expressed as a percentage of the corresponding mid-year population, as reported by the country. Reported coverage rates ≥100% are presented as 100% with a footnote. Subregional aggregated data express average values weighted by population aged <1 year, when a figure is available.

Drop-out rate DTP1-DTP3: Number of DTP1 doses minus the number of DTP3 doses (among children aged <1 year) divided by the number of DTP1 doses, expressed as a percentage.

Municipalities reaching coverage ≥95% for DTP3: Proportion of municipalities reporting coverage levels equal to or greater than 95% for DTP3, respectively, expressed as a percentage. Municipalities are defined as the third administrative level (country level being first), unless otherwise stated.

Morbidity: Number of confirmed cases of wild polio, measles, rubella, CRS, NNT, non-NNT, pertussis, diphtheria, Hib meningitis, and mumps. Subregional aggregated data is the sum of the totals. These are not rates; hence, inter-country comparisons may not be appropriate.

Immunization program management and financing:

• Multi-year plan for immunization: Existence of an immunization strategic plan for more than one year.

Selected Information Products of the Comprehensive Family Immunization Unit



• Immunization Newsletter: A bi-monthly publication that includes information on all aspects of program implementation, from scientific articles on vaccine-preventable diseases and vaccines to practical matters related to the day-to-day running of an immunization program. Copies of the newsletter are available online at www.paho.org/immunization/newsletter.



- XXIII TAG Meeting Report: PAHO's Technical Advisory Group (TAG) on Vaccine-preventable Diseases functions as the leading regional forum to review and promote regional goals and strategies for immunization. Specifically, the TAG reviews national immunization program progress and results, assists in identifying research needs, and oversees the progress of ongoing research efforts. The report of the XXIII TAG meeting held in July 2015 in Varadero, Cuba is now available online at www.paho.org/immunization/TAG-Reports.
- Evidence base for new vaccine introduction in Latin America and the Caribbean: The special supplement to the journal Vaccine, contains recent research developed by the ProVac Network of Centers of Excellence aimed at closing the evidence gap for new vaccine introduction. Available online at www.paho.org/provac (Publications).
- Measles/Rubella (MR) and Polio Bulletins: Weekly epidemiological surveillance bulletins. Available online at www.paho.org/immunization/MeaslesRubellaBulletin and www.paho.org/immunization/PolioBulletin.

- Number of NITAG meetings: Number of times the NITAG met in 2014. NITAGs provide recommendations on immunization practices, including advice on vaccines to be included into the national immunization schedule.
- Number of districts with at least one supervisory visit: immunization supervision including all or most aspects of the program, the supervisions of the local level are generally done by region/department/state or national level
- Plan for immunization injection safety: the existence of a plan to ensure the safety of injections, including training, supervision, and the proper use of safety boxes. This plan may be part of the annual immunization plan of action.
- National system to monitor ESAVIs: System in place for the reporting and follow-up of ESAVIs.
- Spending on routine immunization financed using government funds: Percentage of all of recurrent immunization-specific spending that was financed using government funds (for all recurrent inputs, including vaccines, injection supplies, salaries and per-diems of health staff working full-time on immunization, transport, vehicles and ld chain maintenance, training, social mobilization, monitoring, and surveillance). This excludes any external financing from donors, but may include loans.

- Spending on vaccine purchases financed using government funds: Percentage of all vaccine spending that was financed using government funds. This excludes any external financing from donors, but may include loans.
- Budget line for vaccine purchase: Specific line in the national budget for the purchase of vaccines.

Surveillance indicators: For measles/rubella definitions refer to PAHO. Measles Elimination: Field Guide. (Scientific and Technical Publication No. 605). Washington DC: PAHO, 2005. For acute flaccid paralysis definitions refer to PAHO. Poliomyelitis Eradication: Field Guide. (Scientific and Technical Publication No. 607). Washington DC: PAHO, 2005. Available at http://www.paho.org/english/ad/fch/im/FieldGuide Index.htm.

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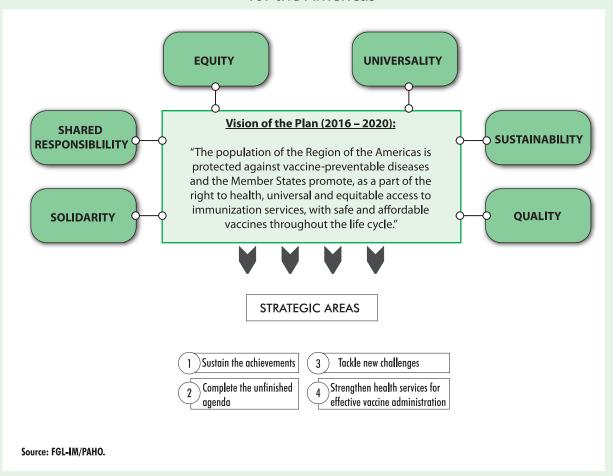
Seasonal Influenza Vaccine Use in the Americas, 2014

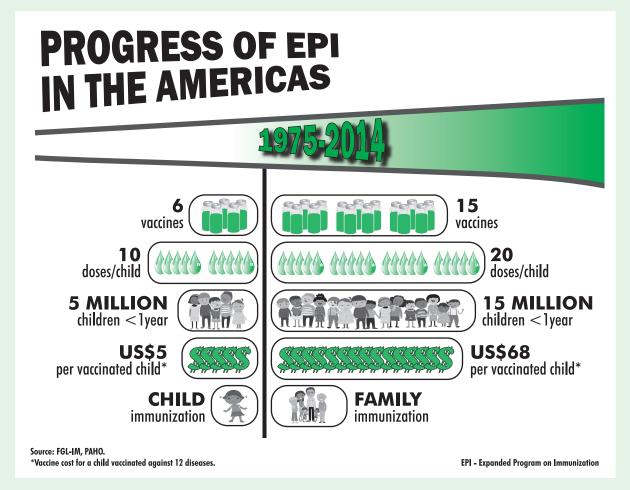
	Childr	en	Elderly A	Adults	Other	Risk Group:	S
Country	6m-23m ^a	24m-59m	Schedule	Coverage (%)	Health Workers	Chronic Disease	Pregnant Women
Anguilla	NA	NA	≥50y		yes		NA
Antigua and Barbuda							
Argentina	50.4	no	≥65y	90.2	84	35	96 ^g
Aruba			≥60y				
Bahamas	11.3	yes	≥50y	100	yes	yes	yes
Barbados	NA	NA	≥65y	100	yes		NA
Belize		no	≥65y	8.6	36		75
Bermuda			≥50y	45.8	39		18
BES*							
Bolivia	44.4	no	≥65v	89	61	100°	59
Brazil	81.5	yes	≥60y	86	97	yes	84
Canada			≥50y		yes	yes	yes
Cayman Islands		yes	≥50y	9.7	ves	73	3
, Chile	72.2	no	≥65v	75.03	100°	100°	97
Colombia	77.1	yes	≥50y	100 ^c	yes	yes	yes
Costa Rica	NA	NA	NA	NA	ŇA	NA	ŇA
Cuba	NA		≥65v	100 ^c	100°	92	88
Curação			≥60y				
Dominica		yes	≥65v	100	60 ^d		yes
Dominican Republic	1.7	no	≥65v	6.3	42	yes	13
Ecuador	62.8	yes	≥60v	39	100°	88	31
El Salvador	68.2	yes	≥60v	74.9	78		75
Grenada		yes	≥50v	, ,,,	ves	ves	NA
Guatemala	7.1	yes	≥65y	64	100	74	17
Guyana	NA NA	NA NA	NA NA	NA	NA	NA	NA
Haiti	NΔ	NA _b	NA NA	NA NA	NA	NA NA	NA
Honduras	Ь р		≥60v	78.9	85	100°	NA
Jamaica	ь	р	· '		16 ^e	20	
Mexico	~ 79.1	yes	 ≥60v	90.6	92	100°	 86
Montserrat	NA.		NA	70.0 NA	NA	NA	NA NA
Nicaragua	b b	NA _b	INA	NA b	68	100°	81
Panama	21.7		 ≥60v	68.8	79		54
Paraguay	44.8	yes	≥60y ≥60y	41.7	59	yes	79
Peru	36.5	yes	≥60y ≥60y	89	97	yes 100°	30
St. Kitts and Nevis	NA	no NA	≥ouy NA	NA	NA	NA	
St. Lucia	NA NA	NA NA					 42
			≥50y	 NA	yes	yes	42
St. Vincent and the Grenadines	NA	NA	NA	NA	NA	NA	
Sint Maarten**	 NA	 NIA					
Suriname		NA			yes	yes	yes
Trinidad and Tobago							
Turks and Caicos	23.7	yes	≥50y		yes	yes	yes
United States of America			≥50y		yes	yes	yes
Uruguay	47.2	yes	≥65y	30.2	46		yes
Venezuela	24.1	yes	≥60y	9.6	74 [†]	10	34
Virgin Islands (UK)	NA	NA	NA	NA	5 ^e	85	NA

^{*} Bonaire, St. Eustatius and Saba; ** Dutch part;

⁽a) pediatric coverage formula: ((2nd dose + single dose)/denominator)*100; (b) with chronic disease; (c) reported coverage > 100%; (d) high refusal rate; (e) low intake of this vaccine by healthcare workers; (f) denominator not updated since 2009; (a) 50% of newborns.

Regional Immunization Action Plan (RIAP) for the Americas

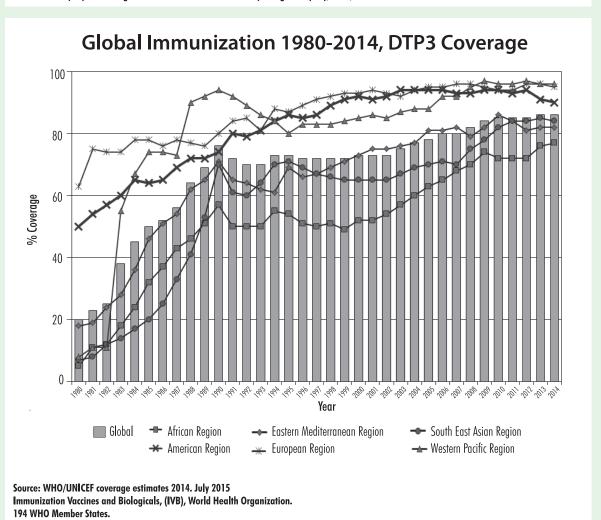




Dashboard of Indicators for Selected Regional Immunization Action Plan (RIAP) Objectives for the Americas, 2013-2014

General (GO) and Strategic Objectives(SO)	Baseline (2013)	Target (2020)	2014
GO 1.2.1 Number of countries and territories in which endemic transmission of measles or rubella virus has been reestablished	1	0	0
GO 2.2.1 Number of countries and territories reporting national average coverage of at least 95% with three doses of DTP vaccine in children under 1 year	19	35	20
GO 2.2.2 Number of countries and territories reporting coverage of at least 80% in each district or equivalent with three doses of DTP vaccine in children under 1 year	12	35	12
SO 4.2.1 Number of countries and territories that have dropout rates below 5% between the first and the third dose of DTP vaccine	11	35	18
SO 4.2.2 Number of countries and territories with coverage above 95% for third dose of DTP vaccine sustained for three or more consecutive years	13	35	14
SO 4.2.5 Number of countries and territories that have a national system for a computerized nominal immunization registry	3	10	3

Source: Country reports through the PAHO-WHO/UNICEF Joint Reporting Form (JRF), 2015; FGL-IM/PAHO.



Epidemiological Surveillance Indicators for Diseases Preventable by New Vaccines in Reporting Countries, Latin America and the Caribbean, 2014

Rotavirus Surveillance, January-December 2014																
Data and Indicators	BOL	CHL	COL	DOM	ECU	SLV	GTM	НТІ	HND	NIC	PRY	PER	VCT	SUR	VEN	TOTAL
Number of hospitalizations <5 years	9,736	15,573	3,204	8,364	19,203	40,591	14,679	917	27,277	11,462	9,304	20,863	114	3,106	14,160	198,553
Number <5 years admitted to hos- pital for diarrhea	1,223	888	536	796	5,131	4,183	2,042	319	3,842	2,196	649	1,866	22	749	876	25,318
Number <5 years who meet the case definition	826	436	536	250	1,510	1,465	942	189	3,078	1,536	627	1,102	14	275	422	13,208
Number <5 years with epidemiologi- cal form and stool specimen	758	434	536	172	1,440	1,325	446	189	1,502	614	316	802	8	222	405	9,169
Positive cases of rotavirus	170	58	268	4	395	135	300	25	266	52	46	113	0	47	39	1,918
Deaths	1	0	0	9	0	0	0	0	8	1	3	4	0	0	0	26
% of positive cases of rotavirus	21%	13%	50%	2%	26%	9%	32%	13%	18%	3%	7%	10%	0%	17%	9%	15%

Bacterial Pneumonia Surveillance, January-December 2014 **Data and Indicators** ARG HND NIC PAN PRY PER TOTAL Number of hospitalizations <5 years 14,837 11,309 14,231 19,203 26,627 3,024 14,111 9,479 9,304 10,223 133,082 1,894 3,214 1,225 2,328 1,020 1,703 1,111 14,737 Number of suspected cases of pneumonia Number of suspected cases with x-ray and epidemiological form 1,703 13,205 1,863 2,643 1,167 1,861 1,009 1,011 Number of probable 2,409 1,306 8,581 cases of bacterial pnemonia Probable cases with blood specimen 2,386 1,277 7,681 Probable cases with pleural fluid specimen Confirmed cases of Hib Confirmed cases of Hi (no b) Confirmed cases of Spn Confirmed cases caused by other bacteria Contamination Deaths

Bacterial Meningitis Surveillance, January-December 2014														
Data and Indicators	ARG	BOL	BRA	COL	ECU	SLV	HTI	HND	NIC	PRY	PER	VCT	VEN	TOTAL
Number of hospitalizations <5 years	14,569	14,127	1,119,902	200	19,202	26,673	661	14,111	9,479	9,304	11,309	114	10,223	1,249,874
Number of suspected cases of meningitis	79	76	8,474	100	179	118	36	56	157	227	81	1	136	9,720
Number of suspected cases with cerebrospinal fluid test and epidemiological form	79	64	7,709	100	178	105	26	41	89	223	81	1	108	8,804
Number of probable meningitis cases	65	41	1,481	15	158	40	26	26	89	35	11	1	97	2,085
Confirmed cases of Hib	6	1		0	1	0	0	1	1	1	2	0	1	14
Confirmed cases of Hi (no b)	4	1	71	0	0	0	0	0	0	0	0	0	0	76
Confirmed cases of Nm	19	1	415	0	0	0	0	0	0	2	0	0	2	439
Confirmed cases of Spn	6	6	183	0	7	1	0	2	1	11	6	0	1	224
Confirmed cases caused by other bacteria	16	5	777	0	16	1	0	4	4	7	0	0	3	833
Contamination		1			10	1			3				1	16
Deaths	5	4	227	0	6	1	0	2	3	9	2	1	7	267