

Vaccine Forecasting

Base Demand Forecast v21

January 2024

gavi.org

Introduction

This is the seventh publication of the Base Demand Forecast that describes the volume projections that inform Gavi's financial forecast and impact projections. Whilst prepared at the individual vaccine level, this forecast takes an aggregate view across the Gavi portfolio. This publication was prepared in 2023 and aligns with the "v21" financial forecast cycle. It covers the majority of Gavi programs but excludes some vaccines within the Vaccine Investment Strategy 2018 (VIS 2018 ^a), stockpiles volumes ^b, Cholera.

The publication is intended to improve the transparency and timeliness of demand forecasts shared with Gavi partners, industry and the public. The Base Demand Forecast is published annually following Gavi's 4th quarter Board meeting where the financial forecast is reviewed. In general, the forecast will be published in December or January each year.

This publication includes tables describing volumes associated with two different country scopes. The first table summarizes volumes for forecasts that generally considered the "Gavi 74" scope – 73 countries eligible for Gavi support as of 2011 and Syria. The second table summarizes actual and forecasted volumes for "Gavi 54" considered as [54 Gavi-eligible countries as of 2023](#).

The volumes presented include doses regardless of actual or projected funding source. The figures include doses projected to be funded by Gavi as well as doses co-financed by supported countries. In addition, the volumes include doses projected to be fully self-financed by countries that have transitioned from Gavi support. Volumes reflect supply constraints where relevant. The Base Demand Forecast presented exclude volumes related to The Big Catch-up initiative.

The Base Demand Forecast aims to inform long-term strategic decisions and thus should not be used to inform short-term operational plans. There are also a number of important nuances in the volume forecasts that have been footnoted to the extent possible. In general, the base demand forecast publication seeks to find a balance between describing some of the key complexities, while still keeping this publication relatively simple for its intended purpose. Nevertheless, we recognize there may be additional details and explanation that will be required for some audiences and purposes. Users of this new publication can contact forecast@gavi.org if they require further guidance or information.

Feedback and suggestions for improvement on this new demand forecast are welcome. Please send comments to forecast@gavi.org.

^a VIS 2018 vaccines not included are rabies and respiratory syncytial virus (RSV). Other VIS 2018 vaccines: Hexa, Hepatitis B birth dose, DTP containing boosters, Multivalent Meningitis Conjugate Vaccine are tentatively included in this forecast and shall be refined over future iterations as Gavi receives more concrete country-level feedback on potential demand.

^b Stockpile volumes refer to Yellow Fever, Multivalent Meningitis Conjugate Vaccine, Ebola, Cholera stockpile, and are excluded from the Base Demand Forecast.

Total Gavi 74 Volume by Vaccine Doses, M

Table A. Total Volumes for "Gavi 74" by Vaccine, doses, millions

Vaccine	Forecasted								Total
	2023	2024	2025	2026	2027	2028	2029	2030	
Pneumococcal conjugate vaccine (PCV)	222	224	231	230	227	227	229	231	1,822
Hexavalent Vaccine (Hexa)		1	9	24	36	58	92	109	329
Pentavalent (DTP-Hib-HepB)	229	240	227	211	203	190	168	154	1,622
Inactivated Polio Vaccine (IPV)	104	108	117	99	94	86	72	63	745
DTP 1st booster	29	29	33	34	34	34	32	29	256
Td 2nd booster	34	34	34	37	40	43	48	57	326
Td 3rd booster			2	5	7	10	15	23	63
HepB vaccine birth dose	34	35	40	47	53	56	61	66	393
Rotavirus	184	186	201	205	208	211	212	215	1,623
Measles-Rubella (MR)	191	213	281	381	247	227	287	252	2,080
Measles	77	35	35	18	10	16	7	5	203
Meningitis A (MenA)	25	28	29	31	49	35	14	13	225
Multivalent Meningitis Conjugate vaccine (MMCV)			37	39	54	43	41	15	229
Yellow Fever (YF)	78	87	94	65	68	76	44	38	549
Japanese encephalitis (JE)	27	27	43	49	39	36	30	30	281
Typhoid Conjugate Vaccine (TCV)	15	103	57	130	139	72	41	41	597
Human papillomavirus (HPV)*	37	34	53	44	50	31	31	35	316
Malaria	3	10	38	61	70	77	82	84	424
Total of above	1,290	1,395	1,560	1,711	1,630	1,529	1,507	1,462	12,082

Sources:

Forecasted doses are from the demand forecast developed in August 2023 used to inform the v21 Gavi financial forecast reviewed by the Gavi Board at its December 2023 meeting.

Notes :

- The figures above reflect assumptions aligned with the Financial Forecast v21 (Aug. 2023) . However, it is one of multiple scenarios of plausible demand. Kindly refer to the vaccine specific SDSs for more information.
- The volumes presented include doses regardless of actual or projected funding source. The figures include doses projected to be funded by Gavi as well as doses co-financed by supported countries. In addition, the volumes include doses projected to be fully self-financed by countries that have transitioned from Gavi support. Volumes reflect supply constraints where relevant. The Base Demand Forecast presented exclude volumes related to The Big Catch-up initiative.
- The table above summarizes actual and forecasted volumes . The table above summarizes volumes for forecasts that generally considered the "Gavi 74" scope – 73 countries eligible for Gavi support as of 2011 and Syria. The country scope considered for MenA, MMCV YF and JE are limited to the geographies where these regional programs focus. The country scope for HPV includes never-eligible Middle-Income Countries.
- Demand for VIS 2018 vaccines not included are rabies and respiratory syncytial virus (RSV). Other VIS 2018 vaccines: Hexa, Hepatitis B birth dose, DTP containing boosters, Multivalent Meningitis Conjugate Vaccine are tentatively included in this forecast and shall be refined over future iterations as Gavi receives more concrete country-level feedback on potential demand. Stockpile volumes refer to Yellow Fever, Multivalent Meningitis Conjugate Vaccine, Ebola, Cholera stockpile, and are excluded from the Base Demand Forecast.
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Total Gavi 54 Volume by Vaccine

Doses, M

Table B. Total Volumes for "Gavi 54" by Vaccine, doses, millions

Vaccine	Actuals										Forecasted										Total
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Pneumococcal conjugate vaccine (PCV)	26	43	61	101	116	124	135	130	126	119	116	140	139	142	147	133	136	137	139	141	2,351
Hexavalent Vaccine (Hexa)														1	9	24	36	58	92	109	329
Pentavalent (DTP-Hib-HepB)	105	134	150	125	141	137	140	129	130	129	137	148	138	148	135	120	112	99	77	63	2,498
Inactivated Polio Vaccine (IPV)				4	31	30	37	52	65	67	69	86	73	86	88	70	65	57	43	34	956
DTP 1st booster													2	2	6	7	7	6	4	1	36
Td 2nd booster													1	1	2	5	8	12	17	25	72
Td 3rd booster															2	4	7	10	15	23	62
HepB vaccine birth dose													15	15	20	27	33	36	40	45	232
Rotavirus		8	17	34	35	37	48	58	52	69	66	76	108	107	115	120	123	125	127	130	1,454
Measles-Rubella (MR)			88	61	50	13	53	34	82	25	133	48	115	131	206	306	162	152	212	170	2,040
Measles		10	115	55	44	42	22	79	81	50	82	55	77	35	35	18	10	16	7	5	839
Multivalent Meningitis Conjugate vaccine (MMCV)															37	39	54	43	41	15	229
Meningitis A (MenA)		56	53	68	31	52	18	21	52	23	30	10	25	28	29	31	49	35	14	13	639
Yellow Fever (YF)	10	8	10	24	19	14	20	48	59	59	65	72	78	87	94	65	68	76	44	38	957
Japanese encephalitis (JE)						9	16	1	1	0	0	2	1	1	17	23	13	10	4	4	101
Typhoid Conjugate Vaccine (TCV)									14	16	28	19	15	103	57	123	139	72	40	41	665
Human papillomavirus (HPV)						2	1	6	10	10	13	14	32	22	19	24	17	14	14	18	216
Malaria									1	2	1	1	3	10	38	61	68	75	80	82	423
Total of above	142	259	493	471	466	461	490	558	673	570	741	670	824	919	1054	1199	1107	1031	1010	957	14,096

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Forecasted doses are from the demand forecast developed in August 2023 used to inform the v21 Gavi financial forecast reviewed by the Gavi Board at its December 2023 meeting.

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Thank you