

Vermont Vaccine Purchasing Program Assessment Calculation Worksheet

Column →	A		B	C		D	E
	CHILDREN			ADULTS			
Line ↓	Prior July 2021	July 2022-June 2023		Prior July 2021	July 2022-June 2023		Comments
A. Preliminary Vaccine Cost Estimates							
01.	15,541,634	15,533,777		6,046,539	7,098,370		Estimated costs of vaccines (sheets e & f)
02.	77,708	77,669	0.50%	30,233	35,492	0.50%	Provision for vaccine utilization increase
03.	0	0	0.00%	212,687	249,685	3.50%	¹ Provision for vaccine cost increase (% is annual)
04.	15,619,342	15,611,446		6,289,458	7,383,547		Est. vaccines costs(w/utilization & price adjustments.)
05.	-8,547,899	-8,543,577		-338,378	-338,378		Estimated VFC Award & 317 federal grant
06.	0	0		0	0		Other
07.	7,071,443	7,067,869		5,951,080	7,045,169		Total estimated VVPP vaccine costs
B. Assessable Covered Lives Estimates							
08.	59,110	57,498		338,380	345,729		Assessable covered lives (sheet c)
09.	0	0	0.00%	0	0	0.00%	Leakage (unknown insurer, out of reach entity, etc.)
10.	59,110	57,498		338,380	345,729		Assessable lives actually paying
C. Financial Carry Forwards							
11.	-1,075,986	757,941		-777,431	637,856		Vaccine fund carryforward (sheet d.)
12.	0	0	0.0	0	0	0.0	Amt. retained for liquidity reserve /reserve months
13.	-1,075,986	757,941		-777,431	637,856		Carryforward to reduce (add to) current assessment
D. Operational and Other Fixed Costs							
14.	261,643	261,511	3.70%	220,190	260,671	3.70%	VDH operational cost
15.	109,296	117,652		90,315	119,381		Administrative fees - KidsVax (from sheet b.)
16.	733	733	0.01%	617	731	0.01%	Bad debt allowance
17.	371,672	379,896		311,122	380,783		Sub-total anticipated operating costs
18.	0	0	0.00%	0	0	0.00%	Working capital reserve build-up
19.	0	0	0.00%	0	0	0.00%	Risk reserves
20.	\$ 371,672	\$ 379,896		\$ 311,122	\$ 380,783		Total fixed costs
E. Assessment Calculation							
21.	\$ 7,443,115	\$ 7,447,765		\$ 6,262,202	\$ 7,425,952		Total assessment funds needed (Line 7 + Line 20)
22.	\$ 1,075,986	\$ (757,941)		\$ 777,431	\$ (637,856)		Plus carry forward credit
23.	\$ 8,519,101	\$ 6,689,825		\$ 7,039,633	\$ 6,788,096		Net assessment funds needed
F. Per Assessable Covered Life Assessment							
24.	\$144.24	\$116.40		\$20.88	\$19.68		Annual assessment per covered life
25.	\$12.02	\$9.70		\$1.70	\$1.64		Monthly assessment per covered life calculated
26.	\$12.02	\$9.70		\$1.70	\$1.64		Monthly assessment per covered life recommended
G. Unexpended Assessments							
27.	733	733		617	731		² Unexpended assessments
H. Various Performance Metrics							
28.	1.55%	1.66%		1.52%	1.69%		Administrative fees - KidsVax as % of vaccine costs
29.	5.25%	5.36%		5.22%	5.39%		VDH operational cost & KV admin. fee as a % of vaccines
30.	29.81%	-19.30%		2.35%	-3.53%		% year to year change in assessment rate
31.	\$ 10.49	\$10.79		\$1.54	\$1.79		³ "Normalized" assessment rate (w/o lines 11, & 18)
32.	-12.7%	11.3%		-11.4%	9.1%		% Change from monthly assessment rate
33.	\$ 10.91	\$11.23		\$1.60	\$1.86		⁴ Preliminary Assessment projection
34.	-9.2%	15.8%		-7.8%	13.5%		Preliminary Assessment increase
I. Vaccine Cost per Covered Life determination							
35.	\$ 119.64	\$ 122.88		\$ 17.64	\$ 20.40		Annual vaccine cost calculated
36.	\$ 9.97	\$ 10.24		\$ 1.47	\$ 1.70		Monthly vaccine cost calculated

Notes:

- ¹ The CDC contract prices change dates are 4/1 for childhood vaccines and 7/1 for adult vaccines.
The child price increase is 0 on Line 3 because VDH anticipates purchasing vaccines administered in April-June 2022 in March 2022, at April 2021 prices. All childhood vaccine cost projections are based on April 2022 CDC pricing.
The line 3 provision for cost increases is applied for 12 months for adult vaccines in order to estimate July 2022 CDC prices.
- ² Carryforward cash amounts, if any, will be used for a working capital reserve if needed, and then applied to reduce future assessments unless otherwise directed by VDH.
- ³ This rate assumes that the working capital reserve is adequate and so included no reserves and also no carry forward.
- ⁴ Preliminary projection: This is the normalized assessment rate and one additional year of inflation and utilization changes.

**Vermont Vaccine Purchasing Program
Budget Estimates and Allocations**

Line ↓	Column →	A	B	C	D	E	F	G	H
		CHILDREN					ADULT		
		Prior Year	Unallocated ¹	Specific	Allocated ¹	Total	Specific	Allocated ¹	Total
01.	Administrative Fees (KidsVax®)								
02.	Annual Base Fee	\$190,950	\$237,033 ²		\$117,652	\$117,652		\$119,381	\$119,381
03.	Expense Allowance (travel)	\$0	\$0 ⁵		\$0	\$0		\$0	\$0
04.	Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
05.	Subtotal	\$190,950	\$237,033	\$0	\$117,652	\$117,652	\$0	\$119,381	\$119,381
General Expenses									
06.	Bank Fees & Service Charges				\$0	\$0		\$0	\$0
07.	Auditing Fees				\$0	\$0		\$0	\$0
08.	Legal Fees				\$0	\$0		\$0	\$0
09.	VVPP Miscellaneous Expenses				\$0	\$0		\$0	\$0
10.	Office Expense				\$0	\$0		\$0	\$0
11.	Telephone Expense				\$0	\$0		\$0	\$0
12.	Postage and Shipping Expense				\$0	\$0		\$0	\$0
13.	Significant Website Enhancement				\$0	\$0		\$0	\$0
14.	Public Information Expense (other than web site)				\$0	\$0		\$0	\$0
15.	Insurance Expense (D&O)				\$0	\$0		\$0	\$0
16.	Printing Expense				\$0	\$0		\$0	\$0
17.	Publications				\$0	\$0		\$0	\$0
18.	Travel Expense				\$0	\$0		\$0	\$0
19.	Meeting Expense		\$0 ⁵	\$0	\$0	\$0	\$0	\$0	\$0
20.	Subtotal	\$0	\$0 ⁵	\$0	\$0	\$0	\$0	\$0	\$0
Special Projects									
21.					\$0	\$0		\$0	\$0
22.					\$0	\$0		\$0	\$0
23.			\$0	\$0	\$0	\$0	\$0	\$0	\$0
24.	Subtotal		\$0	\$0	\$0	\$0	\$0	\$0	\$0
25.	Total Expenses	<u>\$190,950</u>	<u>\$237,033</u>	<u>\$0</u>	<u>\$117,652</u>	<u>\$117,652</u>	<u>\$0</u>	<u>\$119,381</u>	<u>\$119,381</u>

NOTES:

¹ "Unallocated" in this spreadsheet means that the specific item is not specific to either child or adult vaccines. If no other rule is given, allocation will be based upon the ratio of the child & adult total vaccine costs, plus VDH administrative fees (tab a. line 14), plus any carry forward credit or debit (tab a. line 13), respectively, to the total. That computation is as follows:

total child: 6,571,440 total adult: 6,667,984 49.64% is the child % of total

² Comprehensive fee for the upcoming fiscal year.

³ No plans for implementation of lockbox.

⁴ Actual costs, if any. Presently expected to be zero.

⁵ Bundled in KidsVax comprehensive fee for normal amounts.

**Vermont Vaccine Purchasing Program
Estimated Covered Lives for Assessment Calculation**

Covered lives reported to KV for the historical quarter:

Column → Line ↓	A	B	C		D	E	F		G	H		I	J		K	L		M
	Assessment Quarter	Membership Period	Quarter				Monthly Average		Total	Quarterly Variance			Monthly Average (using 12 months)			R12 Trend		
			Kids	Adults	Kids	Adults				Kids	Adults		Kids	Adults		Kids	Adults	
01.	Q1	1/2019-3/2019	178,304	1,024,917	59,435	341,639		401,074		-0.9%	0.6%		59,595	342,395		2.6%	-0.2%	
02.	Q2	4/2019-6/2019	179,777	1,016,235	59,926	338,745		398,671		0.8%	-0.8%		59,634	340,656		1.9%	-0.7%	
03.	Q3	7/2019-9/2019	179,153	1,005,968	59,718	335,323		395,040		-0.3%	-1.0%		59,760	338,820		1.5%	-1.3%	
04.	Q4	10/2019-12/2019	180,310	1,002,208	60,103	334,069		394,173		0.6%	-0.4%		59,795	337,444		0.8%	-1.7%	
05.	Q1	1/2020-3/2020	180,326	1,006,742	60,109	335,581		395,689		0.0%	0.5%		59,964	335,929		0.6%	-1.9%	
06.	Q2	4/2020-6/2020	178,807	1,014,460	59,602	338,153		397,756		-0.8%	0.8%		59,883	335,782		0.4%	-1.4%	
07.	Q3	7/2020-9/2020	176,618	1,016,410	58,873	338,803		397,676		-1.2%	0.2%		59,672	336,652		-0.1%	-0.6%	
08.	Q4	10/2020-12/2020	173,572	1,022,951	57,857	340,984		398,841		-1.7%	0.6%		59,110	338,380		-1.1%	0.3%	
09.	Q1	1/2021-3/2021	173,293	1,033,556	57,764	344,519		402,283		-0.2%	1.0%		58,524	340,615		-2.4%	1.4%	
10.	Q2	4/2021-6/2021	172,208	1,033,714	57,403	344,571		401,974		-0.6%	0.0%		57,974	342,219		-3.2%	1.9%	
11.	Q3	7/2021-9/2021	172,079	1,038,181	57,360	346,060		403,420		-0.1%	0.4%		57,596	344,034		-3.5%	2.2%	
12.	Q4	10/2021-12/2021	172,399	1,043,297	57,466	347,766		405,232		0.2%	0.5%		57,498	345,729		-2.7%	2.2%	
13.		Best Current Estimate (average of the four most recent quarters)												57,498	345,729			

Prior Year's Financial Recap

Column →	A	B	C
Line ↓			
Revenues			
01.	Carryforward from prior year (available cash on hand at 4/1/21)	-\$1,570,914	
02.	Prior Year Reconciliation: VVPP assessment collections 4/1/21-6/30/21	\$125,350	
03.	VVPP assessment collections over reconciliation period 7/1/21-3/31/22	\$11,130,919	
04.	Estimated VVPP assessment collections 4/1/22-6/30/22	\$3,710,306	
05.	Total Revenues		\$13,395,662
Expenditures / Allowances			
06.	Prior Year Reconciliation: vaccine purchase 4/1/21-6/30/21	-\$28,128	
07.	Total vaccine purchases 7/1/21-3/31/22	\$11,279,975	
08.	Estimated vaccine purchase 4/1/22-6/30/22	\$400,000	
09.	Prior Year Reconciliation: KidsVax 4/1/21-6/30/21	\$0	
10.	KidsVax 7/1/20-3/31/21	\$173,656	
11.	Estimated KidsVax 4/1/22-6/30/22	\$45,680	
12.	Prior Year Reconciliation: VDH operational cost 1/1/22-6/30/22	\$3,831	
13.	VDH operational cost 7/1/21-3/31/22	\$92,870	
14.	Estimated VDH operational cost 4/1/22-6/30/22	\$31,981	
15.	Total Expenditures/Allowances		<u>-\$11,999,865</u>
16.	Vaccine Fund Carryforward ¹ (applied to reduce this year's assessment)		\$1,395,797

Notes: ¹ Excess of expenditures over revenue.

VT DOH Pediatric Vaccine Purchase Estimates
Federal Fiscal Year

Column →
Line ↓

	A	B	C	D	E	F	G	H
	Vaccine	Brand Name	VVPP Cost Per Dose ¹	FFY23 estimated doses	FFY23 estimated cost	FFY22 estimated doses	FFY22 actual doses distributed 10/1/21-3/31/22	Actual/Estimate as a %
01.	DTaP	Daptacel	\$19.880	1,000	\$ 19,880	800	340	43%
02.		Infanrix	\$20.368	4,000	\$ 81,472	6100	1830	30%
03.	DTaP-HepB-IPV	Pediarix	\$62.492	5,000	\$ 312,460	8000	2770	35%
04.	DTaP-IPV/Hib	Pentacel	\$65.770	6,000	\$ 394,620	5000	2670	53%
05.	DTaP-IPV-Hib-HepB	Vaxelis	\$95.070	6,500	\$ 617,955	5220	3340	n/a
06.	DTaP-IPV	Kinrix	\$45.269	4,500	\$ 203,711	4000	2120	53%
07.		Quadracel	\$44.320	2,200	\$ 97,504	2200	980	45%
08.	Hib	ActHIB	\$10.390	11,000	\$ 114,290	12000	5105	43%
09.		PedvaxHIB	\$14.820	0	\$ -	4000	20	1%
10.		Hiberix	\$10.109	0	\$ -	0	0	0%
11.	HepA	Vaqta	\$22.640	500	\$ 11,320	0	80	n/a
12.		Havrix	\$22.353	14,000	\$ 312,942	18000	5550	31%
13.	HepB	Recombivax	\$13.550	5,200	\$ 70,460	5000	2330	47%
14.		Engerix B	\$16.270	1,000	\$ 16,270	2000	320	16%
15.	HPV	Gardasil	\$208.050	14,000	\$ 2,912,700	16000	5770	36%
16.	IPV	IPOL	\$15.113	2,200	\$ 33,249	2500	800	32%
17.	Influenza	Fluzone – Quad	\$14.250	9,000	\$ 128,250	12000	10170	85%
18.		FluMist	\$18.880	2,000	\$ 37,760	1500	1500	100%
19.		Fluarix	\$14.660	18,000	\$ 263,880	18000	18000	100%
20.		FluLaval	\$14.660	24,000	\$ 351,840	24000	24000	100%
21.		MMR	MMR II	\$23.670	7,650	\$ 181,076	7500	2860
22.	MMRV	ProQuad	\$153.507	7,500	\$ 1,151,303	7500	2970	40%
23.	MCV4 / MenACWY	Menactra	\$104.718	0	\$ -	12500	3640	29%
24.		MenQuadfi	\$104.718	12,000	\$ 1,256,616	0	730	n/a
25.	MENB	Menveo	\$102.546	50	\$ 5,127	100	10	10%
26.		Trumenba	\$125.770	0	\$ -	0	0	0%
27.		Bexsero	\$134.997	3,000	\$ 404,991	3000	697	23%
28.	PCV13	Pevnar 13	\$158.180	24,000	\$ 3,796,320	25000	10040	40%
29.	PPSV23	Pneumovax 23	\$65.800	60	\$ 3,948	100	18	18%
30.	RV	RotaTeq	\$76.950	8,000	\$ 615,600	8000	3530	44%
31.		Rotarix	\$102.404	6,000	\$ 614,424	6000	2740	46%
32.	Td	TDVAX	\$17.357	400	\$ 6,943	800	91	11%
33.	Tdap	Boostrix	\$35.022	9,000	\$ 315,198	7500	4190	56%
34.		Adacel	\$34.396	5,000	\$ 171,980	3000	1620	54%
35.	VAR	Varivax	\$122.670	7,000	\$ 858,690	7500	2760	37%
36.					\$ 15,533,777			

¹ CDC pediatric vaccine contract prices as of 4/1/22

Estimated VFC portion 55% \$ 8,543,577

Source: Vermont Department of Health Immunization Program

VT DOH Adult Vaccine Purchase Estimates
Federal Fiscal Year

Column →
Line ↓

	A	B	C	D	E	F	G	H
	Vaccine	Brand Name	VVPP Cost Per Dose ¹	FFY23 estimated doses	FFY23 estimated cost	FFY22 estimated doses	FFY22 actual doses distributed 10/1/21-3/31/22	Actual/Estimate as a %
01.	HepA	Vaqta	\$36.260	2,600	\$94,276	1700	890	52%
02.		Havrix	\$36.635	1,500	\$54,953	3500	500	14%
03.	HepB	Engerix B	\$34.009	2,500	\$85,023	2500	1000	40%
04.		HepLisav-B	\$74.940	1,500	\$112,410	2000	475	24%
05.	HepA-HepB	Twinrix	\$63.943	1,200	\$76,732	1500	340	23%
06.	HPV	Gardasil	\$159.773	4,000	\$639,092	4500	1650	37%
07.	Influenza	Fluarix	\$13.410	15,000	\$201,150	16000	16000	100%
08.		FluLaval	\$13.410	26,000	\$348,660	27570	23800	86%
09.		Fluzone syr	\$14.628	3,600	\$52,661	4000	0	0%
10.		Fluzone mdv	\$13.666	0	\$0	300	0	0%
11.		Flucelvax syr	\$18.070	0	\$0	500	20	4%
12.	MMR	MMR II	\$53.929	500	\$26,965	500	200	40%
13.	MCV4 / MenACWY	Menactra	\$80.728	0	\$0	1000	460	46%
14.		MenQuadfi*	\$104.718	1,200	\$125,662	0	0	n/a
15.		Menveo	\$70.974	0	\$0	0	0	n/a
16.	MENB	Trumenba	\$95.470	0	\$0	0	0	n/a
17.		Bexsero	\$111.398	500	\$55,699	550	130	24%
18.	PCV13	Prevnar 13	\$137.220	0	\$0	1250	280	22%
19.	PCV15	Vaxneuvance	\$149.900	400	\$59,960	0	0	n/a
20.	PCV20	Prevnar 20	\$173.000	4,000	\$692,000	0	0	n/a
21.	PPSV23	Pneumovax 23	\$74.503	2,000	\$149,006	5000	1941	39%
22.	RZV	Shingrix	\$98.890	37,500	\$3,708,375	30000	15940	53%
23.	Td	TDVAX	\$16.471	6,100	\$100,473	7000	2759	39%
24.	Tdap	Boostrix	\$25.453	15,000	\$381,795	14750	5550	38%
25.		Adacel	\$26.652	4,300	\$114,604	4250	1790	42%
26.	VAR	Varivax	\$94.385	200	\$18,877	150	90	60%
					\$7,098,370			

¹ CDC adult vaccine contract purchase prices as of 4/1/22

*pediatric price: no adult contract/price until 7/1/22

estimated 317 \$338,378

Source: Vermont Department of Health Immunization Program

Selected History
and
Sensitivity Analysis

Column →	A	B	C	D
Line ↓	<u>Year</u>	<u>Child</u>	<u>Adult</u>	<u>Unusual Factors</u>
01.	2017-18	11.95	0.50	
02.	2018-19	8.15	0.72	
03.	2019-20	4.54	0.56	TRICARE settlement
04.	2020-21	9.26	0.96	
05.	2021-22	12.02	1.70	Added Adult Flu
06.	2022-23	9.70	1.64	
07.	2023-24	11.23	1.86	

Sensitivity Analysis with respect to Cash Release Percentage			
11. If 25% of Carryover Cash Released This Year			
12.	2022-23	10.53	1.76
13.	2023-24	10.41	1.74
21. If 50% of Carryover Cash Released This Year			
22.	2022-23	10.25	1.72
23.	2023-24	10.68	1.78
31. If 75% of Carryover Cash Released This Year			
32.	2022-23	9.98	1.68
33.	2023-24	10.96	1.82