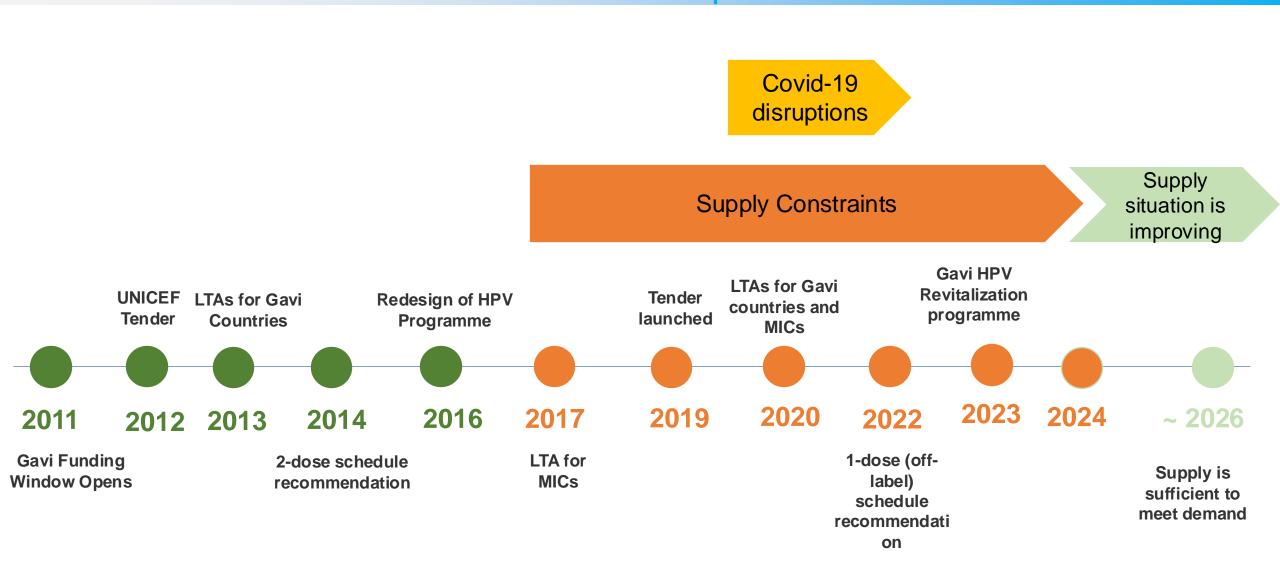


Evolution of the HPV Market and UNICEF procurement



WHO Prequalified Vaccines Available through UNICEF

Manufacturer	HPV types included	Form	No. of doses/vial	Shelf life (months)	VVM	Cold Chain Vol/ Dose	Storage
GlaxoSmithKline [GSK] (Belgium)	Bivalent (16/18)	Liquid	2 dose	60	30	4.8 cm3	2-8°C
Merck Sharp & Dohme	Tetravalent (16/18, 6/11 for anogenital warts)	Liquid	1 dose	36	30	15.0 cm3	2-8°C
[MSD] (USA)	Ninevalent (8,11,18,16,31,33,45,52 and 58)	Liquid	1 dose	36	30	15.11 cm3	2-8°C
Xiamen Innovax (China)	Bivalent (16/18)	Liquid	1 dose	36	14	14.29 cm3	2-8°C
Yuxi Zerun Biotechnology Co., Ltd (China)	Bivalent (16/18)	Liquid	1 dose	24	14	11.8 cm3	2-8°C

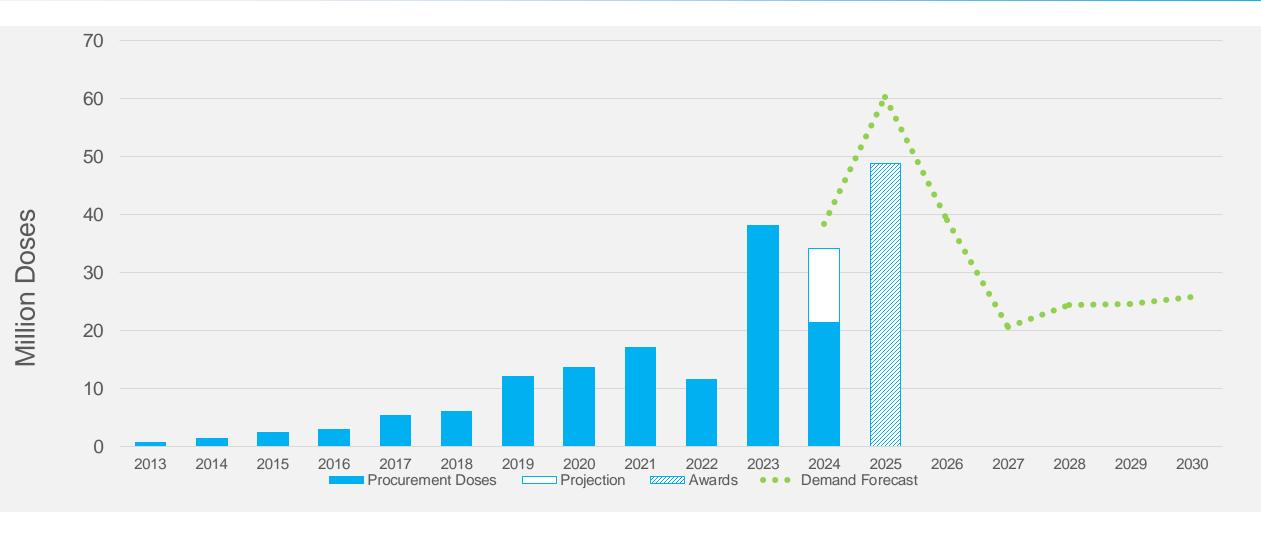
UNICEF currently maintains 6 HPV LTAs for supply of HPV2, HPV4 and HPV9.

- ➤ 3 LTAs for Gavi countries: MSD, GSK and Innovax
- > 3 LTAs for MICs: MSD and GSK
- ➤ 5 LTAs valid through till end 2025
- ➤ 1 LTA (HPV9 for MICs) valid through to end 2027
- > Bivalent HPV from Yuxi Zerun pre-qualified in August 2024 not on LTA for supply at this time.

UNICEF is currently engaged with manufacturers to extend these LTAs to end 2027 to ensure longer term supply.

unicef for every child

Supply and Demand Update



Procurement volume from 2017 to date: 113 million doses

Gavi Supported and Transitioned Countries

2010	2014		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	0	Others
Bhutan**	Rwanda*		Uganda*	Sri Lanka**	Armenia**	Côte d'Ivoire	Georgia**	Mauritania	Lesotho	Cambodia	Mali	Benin	Afghanistan	Niger
		_			Ethiopia	Kenya (21/22)	Cameroon	Sao Tome & Pr.	Burkina Faso	Bangladesh***	Timor Leste**	Burundi	CAR	Papua NG
1					Senegal	Liberia	Myanmar		Mozambique	Nigeria***	Mongolia**	Tajikistan	Chad	Rep. of Congo
1					Tanzania	Malawi	Lao PDR		Sierra Leone	Togo	Angola**	Nepal	Comoros	Rep. of Sudan
1					Zimbabwe	Moldova**		_	Eritrea	Kiribati**		Pakistan	Congo DR	Somaila
1						Uzbekistan**	A		Kyrgyzstan			India	Djibouti	South Sudan
1						Zambia				_		Ghana	Guinea	Syria
1						Gambia							Guinea-Bissau	Yemen
1						Solomon Island							Korea, DPR	Azerbaijan**
1													Madagascar	Ukraine**
4														Viet Nam**
	Introduc	ced												

Introduced, pending multi-age chort

Introduced with multi-aged cohort

Approved pending introduction

Countries not yet applied for Gavi support

Gavi transitioned countries not yet introduced

- Countries approved prior to Gavi's HPV programmatic change in Dec 2016
- Gavi transitioned countries (self-financing)
- Phased introduction
- Routine introductions: 36 countries
- Routine plus multi-age cohort (MAC): 16 countries
- > Approved, pending introduction: 9 countries
- ➤ Introduced pending MACs: 11 countries

Gavi Supported and Transitioned Countries HPV vaccine Pricing

- ➤ Three LTAs for supply of HPV vaccines to Gavi Supported and Transitioned Countries valid until end 2025
- ➤ UNICEF engaged with manufacturers to extend the validity of LTAs until end 2027 in order to secure supply for countries.

Countries interested in procuring through UNICEF from 2025 are encouraged to signal their 5-year forecast and interest to procure through UNICEF in the annual forecast exercise.

Overview of current pricing based on existing LTAs:

Manufacturer	Туре	Vial	Formulation	Gavi/Former Gavi Price*
GSK (Belgium)	HPV2	2-dose vial	Liquid	\$5.18 / dose
Merck (USA)	HPV4	1-dose vial	Liquid	\$4.50 / dose
Innovax (China)	HPV2	1-dose vial	Liquid	\$2.90 / dose
Yuxi Zerun Biotechnology (China)	HPV2	1-dose vial	Liquid	-

^{*}Certain conditions to be met for former Gavi countries to be eligible for Gavi Price (check details with UNICEF for your country)

Note: All products listed are WHO prequalified. Information above represents a summary of 2024 prices. Pricing updates and details are available at: Vaccines pricing data | UNICEF Supply Division

UNICEF's Strategy to Support Vaccine Access in MICs

OBJECTIVES

Secure timely access and uninterrupted supply of life-saving vaccines in MICs to meet routine demand and enable new introductions.

Access
affordable
prices for MICs
and increase
transparency of
prices.

Enable entry of pipeline manufacturers to evolve the market health with multiple, geographically diverse suppliers.

Secure demand and maintain long-term market attractiveness for industry.



Human Papillomavirus (HPV) Vaccine Price MICs

- > Three LTAs for supply to MICs.
- > Two valid till end 2025.
- > Single LTA for HPV9 valid till end 2027.

Manufacturer	Туре	Vial	Formulation	MIC Price Range
GSK (Belgium)	HPV2	2-dose vial	Liquid	\$10.25 - \$14.14
Moral (LISA)	HPV4	1-dose vial	Liquid	\$13.50 - \$26.75
Merck (USA)	HPV9**	1-dose vial	Liquid	Tiered Pricing***
Innovax (China)	HPV2	1-dose vial	Liquid	TBD
Yuxi Zerun Biotechnology (China)	HPV2	1-dose vial	Liquid	-

^{*}Certain conditions to be met for former Gavi countries to be eligible for Gavi Price (check details with UNICEF for your country)

Note: All products listed are WHO prequalified. Information above represents a summary of 2024 prices. Pricing updates and details are available at: <u>Vaccines pricing data | UNICEF Supply Division</u>

^{**} HPV9 currently available for self-financing countries

^{***} Conditions apply

Conclusion

Gavi supported and transitioned countries

- > Supply will need careful planning until 2026 and it will be dependent on timing of large MACs, countries product choice and schedule decision.
- > Sustainability of HPV vaccination is a concern for countries when they transition from Gavi support.
- Fully self-financing countries may have access to prices for Gavi supported countries, depending on country transition date, vaccine introduction status and Gross National Income (GNI) per capita. The price commitments are time-limited. (https://www.gavi.org/sites/default/files/document/supply-procurement/vaccine-price-commitments-from-manufacturers.pdf)

Middle Income Countries

- Vaccine affordability is a concern for countries.
- Countries may have access to improved pricing. Access is dependent on availability of long-term demand forecasts and willingness to commit to multi-year commitments.

Countries are encouraged to respond to the UNICEF "Middle Income Country Survey - HPV, PCV, Rotavirus – 2024" which was shared last week.

