




MARKET INTELLIGENCE AND DEMAND

DCVMN AGM 2019
Rio de Janeiro, Brazil

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UNICEF Supply Division

unicef  for every child

UNICEF procures vaccines & vaccine related supplies for around 100 countries annually

2018

Vaccines: US\$ 1.453 billion

2.36
billion doses

2,628
shipments

Full Schedule

Partial Schedule

Countries incl. in
Annual Forecast

Immunization Supplies:

Vaccines

BCG, DTP, DT, TT/Td, OPV, HepB,
HepA, YF, Pentavalent, MCV,
Meningococcal, PCV, IPV, HPV, JE,
OCV, Rota, Typhoid, Malaria,
Seasonal Influenza etc.

Safe Injection Equipment

Cold Chain Equipment

For full and partial schedules, information is based on country forecasts to UNICEF for 2019

This map does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers.



Nearly two decades ago!

United Nations Children's Fund

Executive Board

First regular session 2002

21-25 January 2002

Item 6 of the provisional agenda*

**Vaccine security: ensuring a sustained, uninterrupted supply of
affordable vaccines**

Vaccine Security - Vision 2.0

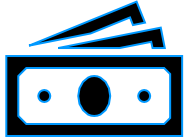
The broad public health community on Vaccine Security must be focused on:

- ⇒ Ensuring every child has timely access to vaccines, winning support from decision-makers and the wider public in recognizing the value of vaccines and immunization across the life cycle and in ensuring sufficient resources are earmarked;
- ⇒ Stimulating manufacturers from both IFPMA and DCVMN to ensure an uninterrupted supply of quality assured vaccines to all countries, leveraging the power of business and markets;
- ⇒ Embracing and fostering innovation on vaccine improvements, new platforms and production technologies that enhance vaccine access.



Vaccine Security pillars: Available Funding, Accurate Forecasting and Appropriate Contracting

This focus needs to be continued but with major shifts foreseen over the next decade:



Available funding: UNICEF will focus on enhancing its financing options through its procurement services, and continue to work with countries to secure sufficient domestic resources for vaccines well ahead of need in order to meet manufacturer deadlines for delivery.



Accurate forecasting: The next decade should include clear programming in policy planning on specific vaccines to ensure sufficient lead-time for production scale up.



Contracting: Longer-term contracts, firm orders, pre-payment, ... all been used but to respond to country demand, including pull incentives and contracting and stockpiling of vaccine that have not achieved (and may never) regulatory approval.

UNICEF involvement across country, regional and headquarter's offices must address two broad themes related to Vaccine Security going forward:



Capacity building to develop national supply chain systems, including the upstream on procurement and financing, and downstream on vaccine management, delivery, monitoring and evaluation.



Market intelligence, providing reliability and predictability on global vaccine demand and supply.

Capacity Building: Knowledge Sharing and VPPEF



- Launched online forum (<http://www.vppnetwork.org/>) to support peer-to-peer exchange... The Vaccine Procurement Practitioners Network (VPPN) →
- Working with partners (Gavi, BMGF, R4D) to integrate within knowledge sharing platform for Gavi transitioning countries



New Initiatives: Strategic Vaccine Procurement



Vaccine procurement [assessment toolbox](#)

- **What:** A standardized methodology for governments to assess national vaccine procurement processes
- **When:** Expected January 2020
- **Who:** National governments



Vaccine procurement [e-learning course](#) → Under development (in collaboration with Global partners and Industry)

- **Objective:** Participants to be able to identify & understand the strategic vaccine procurement cycle & its tools and processes to ensure sustainable access to affordable vaccines
- **Collaboration:** BMGF, CHAI, DCVMN, IFPMA, Gavi, MSF, Norwegian IPH, WHO, PAHO, Path, World Bank,
- **Status:** All modules are under development, with most within the peer review stage

Regulatory update

Demand

- Some countries have local licensure requirements for vaccines, including WHO pre-qualified vaccines of assured quality.
- The regulatory requirements of countries that accept WHO PQ vaccines may change without prior notice; clarity of registration pathway and insufficient time for manufacturers to register.

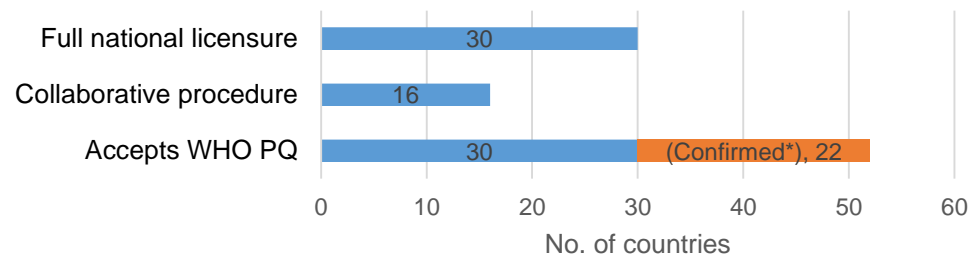
Supply

- There are instances where documented waiver of registration is required from countries where vaccines are not yet registered.

Impact

- Regulatory challenges are a risk to vaccine security, and can cause delay, cancellation or quarantined on arrival.
- Additional costs due to regulatory challenges and investments to register vaccines across several countries.

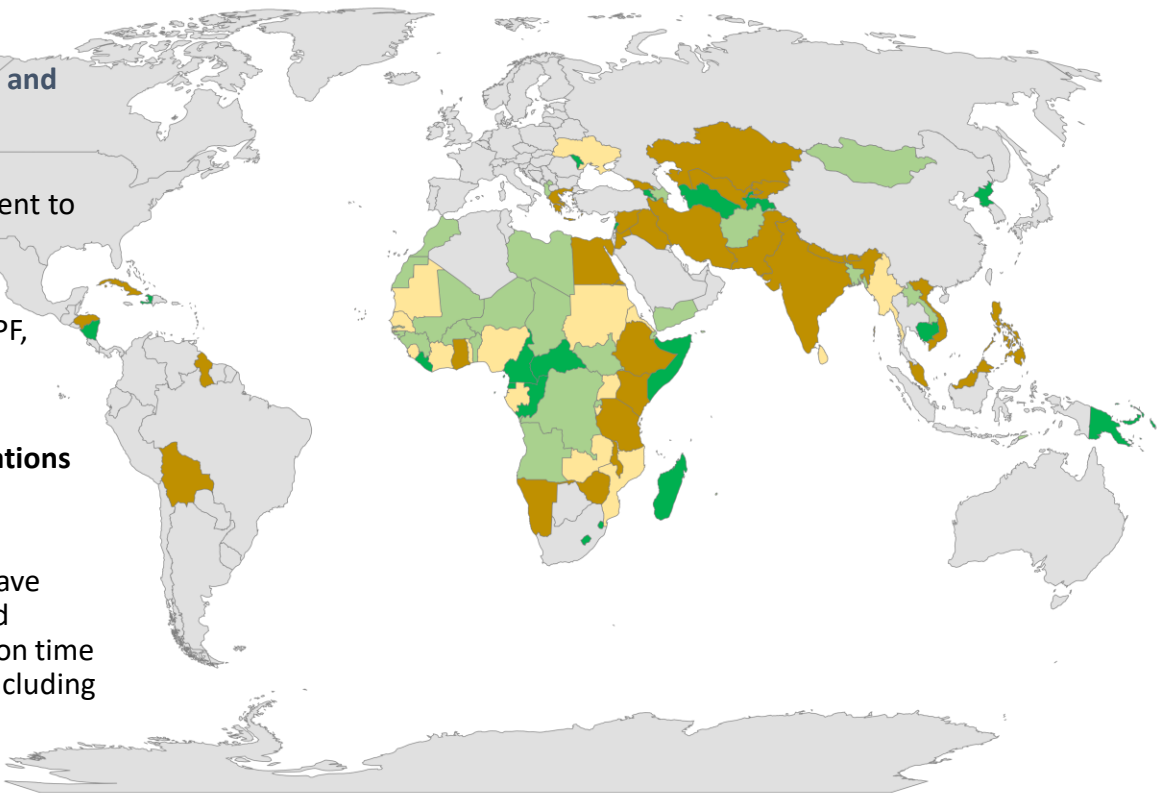
NRA requirements of countries



Regulatory requirements

■ Accepts WHO PQ (confirmed*) ■ Accepts WHO PQ ■ Collaborative procedure ■ Full national licensure

- A **database of country regulatory requirements** and registration status of supplier-specific vaccines in 100+ countries.
- **(Currently 2080 files of vaccines registration data and growing)**
- **Contractual requirements of bidders** to share registration status of their products and commitment to continuously share updates on new registrations, variations and renewals
- Advocacy with partners and countries through VPPF, VPPN, **annual forecasting exercise** for continuous improvement.
- Working with countries to secure **official confirmations** of their NRA requirements from their designated government officials for the MOH.
 - 22 out of 52 countries that accept WHO PQ have confirmed with an official letter (on-going), and agreed to provide sufficient notice and transition time for any future changes in NRA requirements, including clarity on the pathways for vaccines licensure



UNICEF engagement with businesses and industries



- Targeted **bilateral engagement with companies**, particularly at Executive/President-level to establish positive relationships and to discuss strategic issues, including to influence R&D pipelines.



- Regularly **engage with industry associations** (e.g. IFPMA, DCVMN) for pan-industry reach and to understand industry trends.



- **Convene industry-wide forums by segment/product group** on a (bi)-annual basis for dialogues on strategic direction, as well as to understand supplier challenges and market perspectives. These bring together **>1000 participants** across ~20 industry meetings per year.



- Various interaction with industry are based on **fairness and transparency**, while at the same time ensuring **confidentiality** of commercially sensitive information.
- **Publish strategic market information** (e.g. market analyses, demand/supply volumes, pricing, and procurement plans, etc.) to **reduce market information asymmetries** and ultimately to improve market functioning.

Price Transparency: historical data

Visit UNICEF's webpage on [vaccine price data](https://www.unicef.org/supply/index_102225.html):
https://www.unicef.org/supply/index_102225.html

UNICEF Price data overview

Background: UNICEF procures key essential and strategic products for children. To provide greater transparency, UNICEF publishes historic, current, and future awarded prices for some essential and strategic products. UNICEF lists prices based on its mandate, commercial terms, and long standing relationship with industry. All prices are in **US Dollar**. Euro prices are converted at the **UN-official rate** of exchange published by <https://treasury.un.org>

Information disclosure policy: Ref. UNICEF Executive Board document E/ICEF/2009/15 (the 'Accountability Report'): UNICEF makes reliable and timely information available about existing conditions, decisions, and actions related to the organization's activities, in an accessible, visible, and understandable manner, unless deemed confidential. UNICEF makes public its international procurement solicitation notices and awarded contracts. UNICEF publishes the information on UNICEF Supply Division's website and the UN Global Marketplace. UNICEF Supply Division's website also provides procurement data by vendor, country, amount, and type of services/goods.

For further questions or additional information, please contact: supply@unicef.org stating subject matter "Price Transparency"

REMEMBER: Refresh
browser page to
reset filters if
needed... See Arrow
BOTTOM RIGHT

SELECT CATEGORY

Cold Chain
Equipment



Mosquito Nets



Nutrition



Safe Injection
Equipment



Vaccines

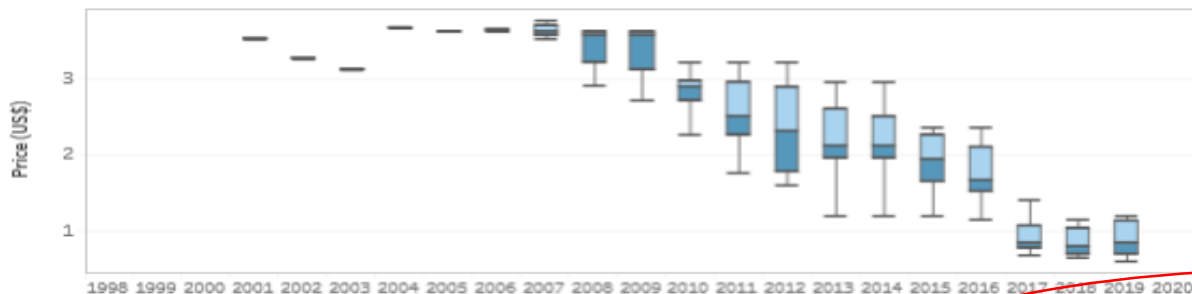
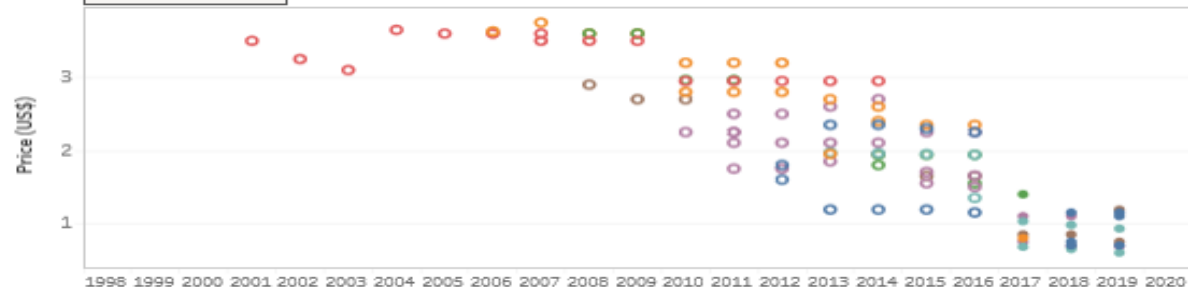


Price details per product

INTRODUCTION: The figure provides an overview of the procurement prices contracted with UNICEF for individual products.

Hover over a dot to see more information

Diphtheria, Tetanus, Pertussis - Hepatitis - Haemophilus Influenzae type B (..



Manufacturer

- Biological E
- Cruce / Berna Biotech Korea / Janss...
- GlaxoSmithKline (GSK)
- LG Chem
- Panacea Biotech
- Serum Institute of India
- Shantha Biotechnics

Conditions

Data shows the awarded price per dose (in US\$) per product per supplier per calendar year, based on a multi year supply agreement. Data shows most prices with CPT incoterms from 2001 - 2003; change to FCA incoterms from 2004-2006 onwards. Where agreements include a range of prices during a calendar year period or for different countries or groups of countries, prices are shown with the low and high spot price. The prices for 2001-2016 were applicable to GAVI supported countries only. Prices for 2017-2019 are applicable for all procurement forecast to come through UNICEF (includes countries receiving Gavi support, Gavi graduated countries and countries that do not receive Gavi support) Prices are shown in USD recalculated using official UN mid-year exchange rates.

Last updated 18th October 2016.

SELECT PRODUCT

Select the product you want a detailed overview

Product Name

1. Diphtheria, Tetanus, Pertussis - Hepatitis - Haemop...

Filter presentation for individual products

Select one or more presentations in the dropdown menu.

Presentation

2. (All)

Price eligibility filter (vaccines only)

- 3.
- ☒ Gavi-eligible country price
 - ☒ UNICEF long-term arrangement (LTA) agreed price

Shape legend:

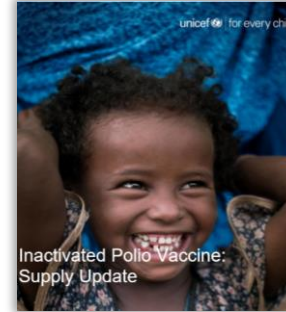
- ☐ Gavi-eligible country price
- ☐ UNICEF long-term arrangement (LTA) agreed price

Remember: refresh the page to reset filters

UNICEF tools for vaccine supply management



ViVa (Visibility for Vaccines) is a stock monitoring dashboard that visualizes the pipeline of vaccine orders and forecasts, enabling country governments to identify risks of stock outs or overstocking and take action before they occur.



Market notes highlight the essential current market trends in supply, demand, shortages, surplus, availability of key strategic products UNICEF procures. They raise areas of concern and issues UNICEF seeks to address.

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Presentation	Supplier Name	
DTP4/Polio/ Hib vaccine in a single dose liquid presentation	Biological E	
	Connaught/Biochem Biotech/Novartis/Vaccines Corp.	
	Panacea Biotech Ltd.	
	Shantha Biotechnics Ltd.	
DTP4/Polio/ Hib vaccine in a single dose liquid presentation	Novartis Institute of India Ltd.	
	S.L. Un Sciences Ltd.	
	Biological E	
	S.L. Un Sciences Ltd.	
DTP4/Polio/ Hib vaccine in a single dose liquid presentation	Panacea Biotech Ltd.	
	Shantha Biotechnics Ltd.	
	Novartis Institute of India Ltd.	
	Biological E	
DTP4/Polio/ Hib vaccine in a single dose liquid presentation	Shantha Biotechnics Ltd.	
	S.L. Un Sciences Ltd.	
	Novartis Institute of India Ltd.	
	Biological E	

Data shows the awarded price per dose (in USD) per product per supplier per calendar year. Data shows the awarded price with VAT inclusive from 2017-2020. Award to Calmette from 2017-2020. Other agreements include a range of prices during a calendar year period or for different rounds of tenders. The prices for 2017-2020 were applicable to GAVI supported countries only. Prices for 2017-2020 are applicable for all procurement between to some degree UNICEF (India). Last updated 18th October 2016.

The **Vaccine Pricing Guidelines** have been prepared following consultations with vaccine suppliers to UNICEF on making pricing information more transparent.

The vaccine prices received by UNICEF from industry are based on the UNICEF mandate, UNICEF aggregated quantities, commercial terms, reliability of forecasts, payment terms and long standing relationship with industry.

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Air Freight Calculator

You need to consider the following:

- * Weight / Volume data accuracy
- ** If cargo weight is > 5000 kilos, please send a freight request to freight@unicef.org

Select Loading Country
Select Loading Port
with code:

Select Discharge Country
Select Discharge Port
with code:

Select Cargo type

Enter Gross Weight (KGS)
Enter Volume (CBM)

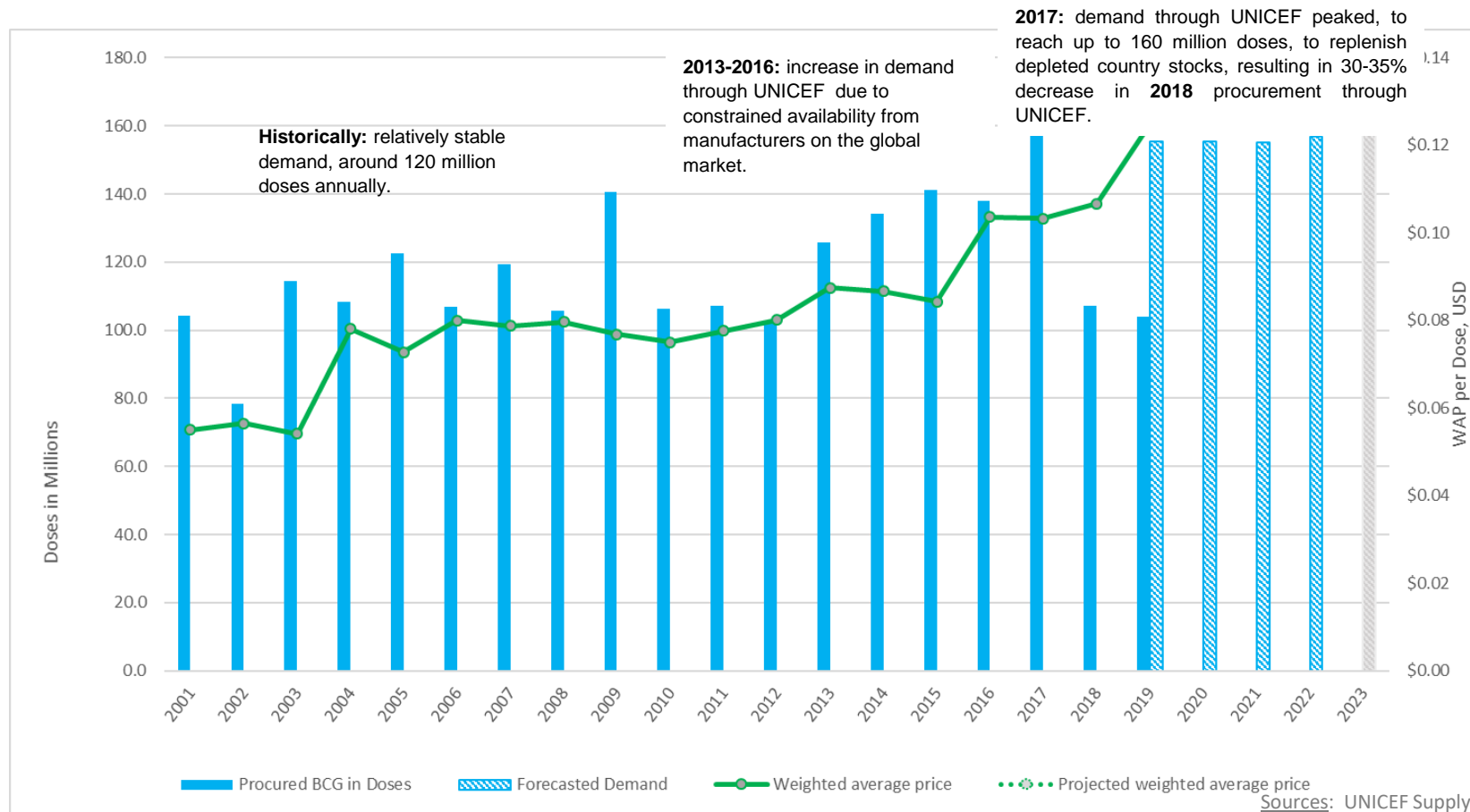
Chargeable weight

Estimated in currency USD

To support budget planning, the Supply Dashboard in InSight includes:

- Average **lead times** per product to each country.
- The **Freight Calculator** which provides an estimate for cost of freight of vaccines and injection devices.

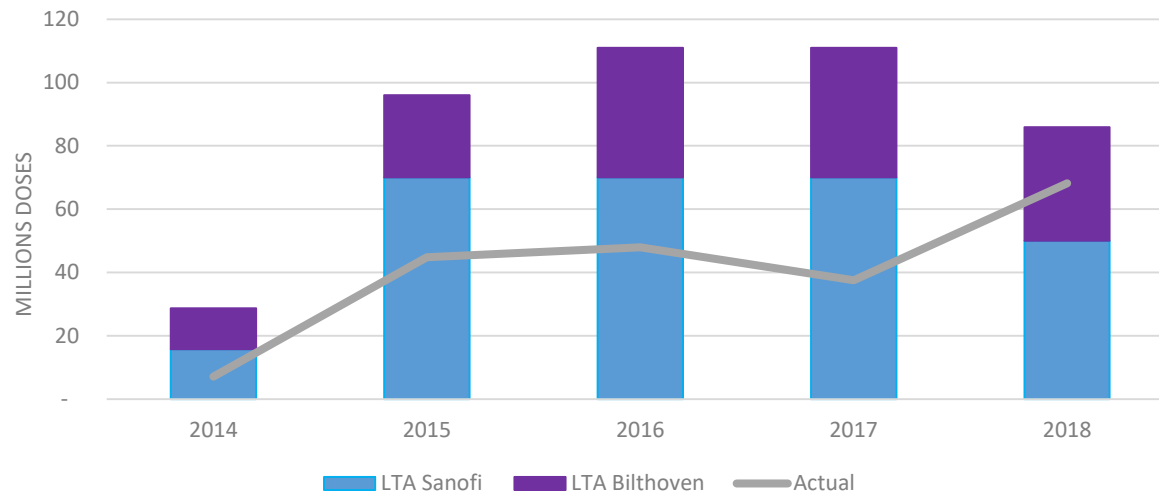
The need for understanding global demand: the case of BCG vaccine



The case of IPV: UNICEF collaboration with PAHO

- 2014 to 2018 only 48% of the awarded IPV quantities were supplied to UNICEF
- 35 lower risk countries for polio were required to delay introduction or interrupt programmes

Contracted v Actual Quantities



UNICEF collaboration with PAHO during the period of insufficient supply to meet demand:

- Regular contact with PAHO to update on changes to supply availability
- Ensure supply allocations were transparent
- Joint visit to supplier

Lessons learnt from this period are applied in award strategies for the current tender

UNICEF 2019 – 2020 Tender Calendar

Product	2019	2020				Current Award Period	Next Award Period
	Q4	Q1	Q2	Q3	Q4		
Human Papilloma Virus Vaccines (HPV)						2020/2022	5-7 years (TBD)
Ebola Vaccine						NA	5+2 years (TBD)
Hepatitis B Vaccine - pediatric (Hep B)						2018-2020	2021+ (5-7 years)
Diphtheria, Tetanus and Pertussis vaccine (DTP)						2018-2020	2021+ (5-7 years)
Pentavalent Vaccine (Penta)						2018-2020	2021+ (5-7 years)
Measles Containing Vaccine						2018-2020	2021-2023/2025
Yellow Fever Vaccine						2018-2020	2021+
Rotavirus Vaccine						2018-2021	2022-2027
Pneumococcal Conjugate Vaccine						2021/2027	TBD
Typhoid Conjugate Vaccine						2019-2020	2021-2022
Inactivated Polio Vaccine						2019-2022	TBD
Meningococcal Vaccine (Stockpile and Men A)						2018-2021	2022+
Oral Cholera Vaccine						2016-2019	TBD
Rabies Vaccine						2019-2020	TBD
Adult Tetanus Toxoid (TT) and Tetanus-Diphtheria (Td) Vaccines						2019-2021	2022+
Japanese Encephalitis (JE)						2018-2022	2023+
Bacillus Calmette-Guerin vaccine (BCG)						2019- 2023	2024+
Bivalent Oral Polio Vaccine (bOPV)						2018-to cessation	

Market Intelligence

Inactivated Polio Vaccine Supply Update - May 2018

This note provides an update on inactivated poliovirus vaccine (IPV) supply and demand. Supply is sufficient to meet demand for rough UNICEF. It details information on catch up immunisation for 35 countries, and its outlook on the market's medium-term.

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Human Papillomavirus Vaccine Supply & Demand Update - June 2018

This update provides information on human papillomavirus vaccine, including concerns of self-funding against constrained supply programme design.

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Inactivated Polio Vaccine: Supply Update

UNICEF Supply Division

May 2018

Human Papillomavirus Vaccine: Supply and Demand Update

UNICEF Supply Division

June 2018

Presentation	Supplier Name	DTP-HepB-Hib							
		2009	2010	2011	2012	2013	2014	2015	2016
DTP-HepB-Hib vaccine in a single dose liquid presentation	Biological E					\$2,3500	\$2,3500	\$2,3000	\$2,2500
	Cruce/Berna Biotech Korea/Janssen Vaccines Corp.	\$3,6000*	\$2,8000-\$3,2000	\$2,8000-\$3,2000	\$2,8000-\$3,2000	\$1,9500-\$2,7000	\$2,4000-\$2,6000	\$2,3500	\$2,3500
	Panacea Biotech Ltd.	\$3,6000	\$2,9650	\$2,9650					\$0,8000
	Shantha Biotechnics Ltd.	\$2,7000	\$2,7000						\$1,4000
	Serum Institute of India Ltd.			\$2,2500-	\$2,5000	\$2,6000	\$2,7000	\$2,2500*	\$2,2500*

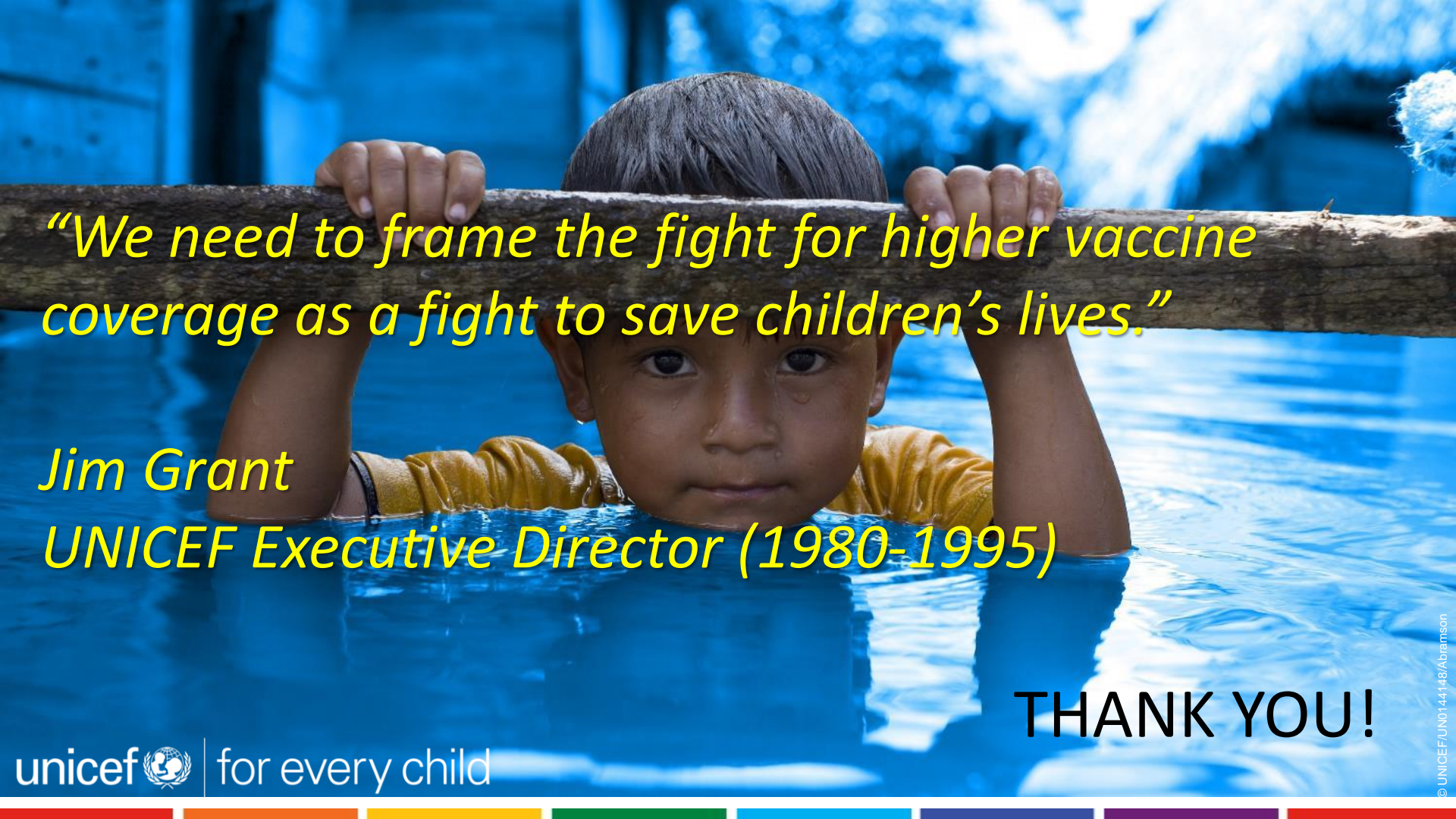
ED BY UNICEF FOR GAVI, THE VACCINE ALLIANCE

on	Number of awarded manufacturers	Storage space (m ³ /doses)		VVM		Product availability			Projected Weighted Average Price per Dose								
		Vaccine	Diluent			2018	2019	2020	2018	2019	2020						
1 ds	6	10.3 - 16.8	-	VVM14	Yes	Supply exceeds demand	Supply exceeds demand	Supply exceeds demand	\$1.08	\$1.05	Pending tender	900*	\$1,1900*	\$1,1900*	\$1,1500*	\$0,70-0.75	\$0,9800
10 ds	4	2.1 - 4.4	-	VVM14	Yes	Supply exceeds demand	Supply exceeds demand	Supply exceeds demand	\$0.74	\$0.69	Pending tender			\$1,3500	\$0,6800	\$0,6500	
1 ds	1	15.0	-	VVM30	Yes	Limited supply	Limited supply	Limited supply	\$4.50	Pending tender	Pending tender		\$1,8000-\$1,9400*	\$1,9400*	\$1,5500-\$1,9400*		
2 ds	1	4.8	-	VVM30	Yes	Limited supply	Limited supply	Limited supply	\$4.50	Pending tender	Pending tender			\$1,6500	\$1,6500	\$0,8500	\$0,8500
1 ds	1	16.7	-	VVM7	Yes	Limited supply	Limited supply	Limited supply	\$2.80	Pending tender	Pending tender	500-	\$1,9500-\$2,1050	\$1,5500-\$1,7050*	\$1,5000-\$1,6550*	\$0,7500	\$0,6900
5 ds	1	4.0	-	VVM7	Yes	Limited supply	Limited supply	Limited supply	\$1.90	Pending tender	Pending tender	050					
10 ds	1	2.46	-	VVM7	Yes	Limited supply	Limited supply	Limited supply	\$0.75	Pending tender	Pending tender						
10 ds diluent	1	2.60	3.11	VVM30	Yes	Supply exceeds demand	Supply exceeds demand	Supply exceeds demand	\$0.69	Pending tender	Pending tender						
10 ds diluent	1	2.10	3.11	VVM30	Yes	Supply exceeds demand	Supply exceeds demand	Supply exceeds demand	\$0.52	Pending tender	Pending tender	1500	\$2,9500				
1 ds	2	11 - 16.8	-	VVM30	Yes	Needs planning	Needs planning	Needs planning	\$1.84	Pending tender	Pending tender	1700	\$1,9600	\$1,9500	\$1,9400		
1 ds	1	7.85	-	VVM30	Yes	Needs planning	Needs planning	Needs planning	\$1.25	Pending tender	Pending tender						
2 ds	1	4.84	-	VVM30	Yes	Needs planning	Needs planning	Needs planning	\$3.05	\$3.05	\$3.05						
4 ds	1	4.84	-	VVM30	Yes	Needs planning	Needs planning	Needs planning	\$3.05	\$3.05	\$3.05						
1 ds	1	12.01	-	VVM30	Yes	Needs planning	Needs planning	Needs planning	\$3.30	\$3.30	\$3.30						
4 ds	1	3.00	-	VVM30	Yes	Needs planning	Needs planning	Needs planning	\$2.95	\$2.95	\$2.95						
1 ds	1	17.33	-	VVM14	Yes	Limited supply	Limited supply	Limited supply	€1.88	€1.88	€1.88						

house, Copenhagen

ITB-DAN-2014-19431	08/11/2017	HB Pencils and Colouring Pencils
ITB-DAN-2014-19431	08/11/2017	HB Pencils and Colouring Pencils
ITB-DAN-2014-19431	08/11/2017	HB Pencils and Colouring Pencils
RFP-DAN-2017-502534	24/07/2017	Tubes-feeding/aspiration, suction, endotracheal.
RFP-DAN-2017-502534	24/07/2017	Tubes-feeding/aspiration, suction, endotracheal.
RFP-DAN-2017-502534	24/07/2017	Tubes-feeding/aspiration, suction, endotracheal.
RFP-DAN-2017-502534	24/07/2017	Tubes-feeding/aspiration, suction, endotracheal.

Visit UNICEF's website on [market updates](https://www.unicef.org/supply/) here: <https://www.unicef.org/supply/>



“We need to frame the fight for higher vaccine coverage as a fight to save children’s lives.”

Jim Grant
UNICEF Executive Director (1980-1995)

THANK YOU!