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DCVMN Annual General Meeting

UNICEF Stockpiling Strategies and Priorities

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UNICEF

unicef  for every child

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Outline

- ☐ Vaccine Procurement Overview
- ☐ Emergency preparedness: supply considerations
- ☐ Vaccine in Emergencies
- ☐ General Resources on Immunization

UNICEF procurement value by major commodity groups



Vaccines

\$1.643 billion



Pharmaceuticals

\$160.6 million



Water & Sanitation

\$108.2 million



Nutrition

\$150.6 million



Medical supplies

\$138.7 million



Bed nets

\$90.7 million



Education

\$83.8 million

\$3.519 billion

of supplies + services for 147 countries and areas

\$1.73 billion

in procurement on behalf of 80 self-financing governments and partners

\$2.637 billion

supplies

\$882 million

services

81% of UNICEF procurement is in collaboration with other UN agencies (\$2.858 billion)

UNICEF has a key role in vaccine procurement and procuring immunization supplies on behalf of around 100 countries annually



2016 Vaccines Supplies: US\$ 1.64 billion

2.50
billion doses

2,613
shipments

Immunization Supplies



Vaccines

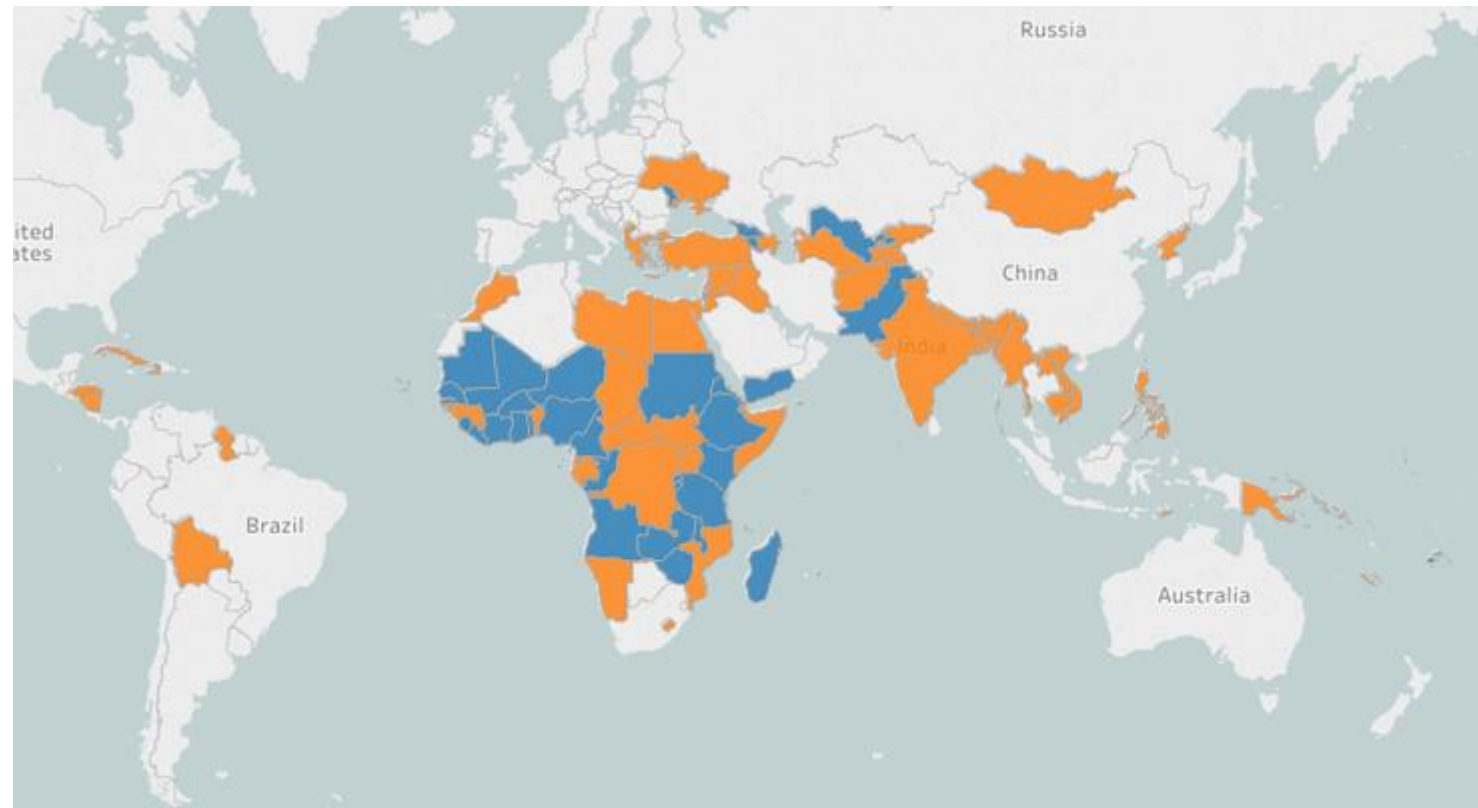
BCG, DTP, TT/Td/DT, Measles containing, OPV, HepB, YF, DTP-HepB, DTP-HepB/Hib, DTP/Hib, Hib, MR, Meningitis, MMR, PCV, RV, IPV, HPV, etc.

Safe Injection equipment

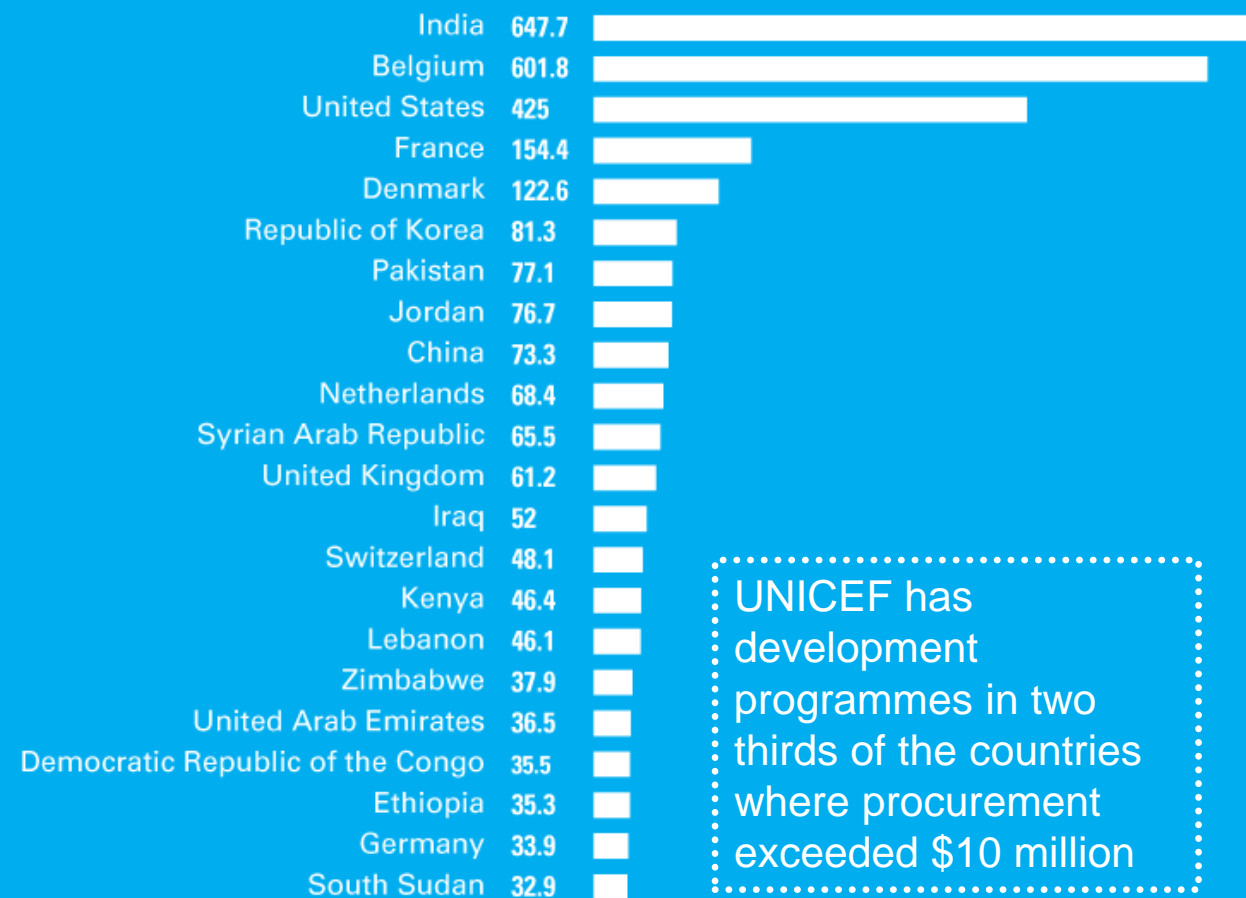
Cold Chain Equipment

Countries UNICEF procures on behalf of

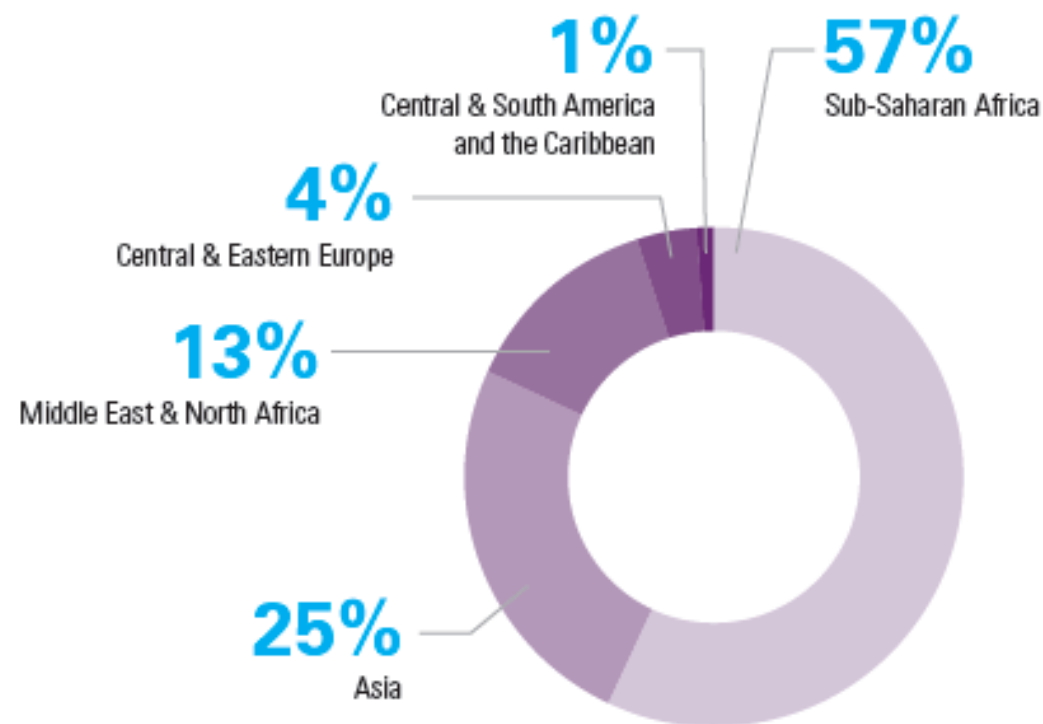
-  Full schedule
-  Partial schedule



Supplier countries with highest procurement value (2016 – in mln USD)



Regions where UNICEF supplies were used (2016)





Emergency Preparedness: Supply Considerations



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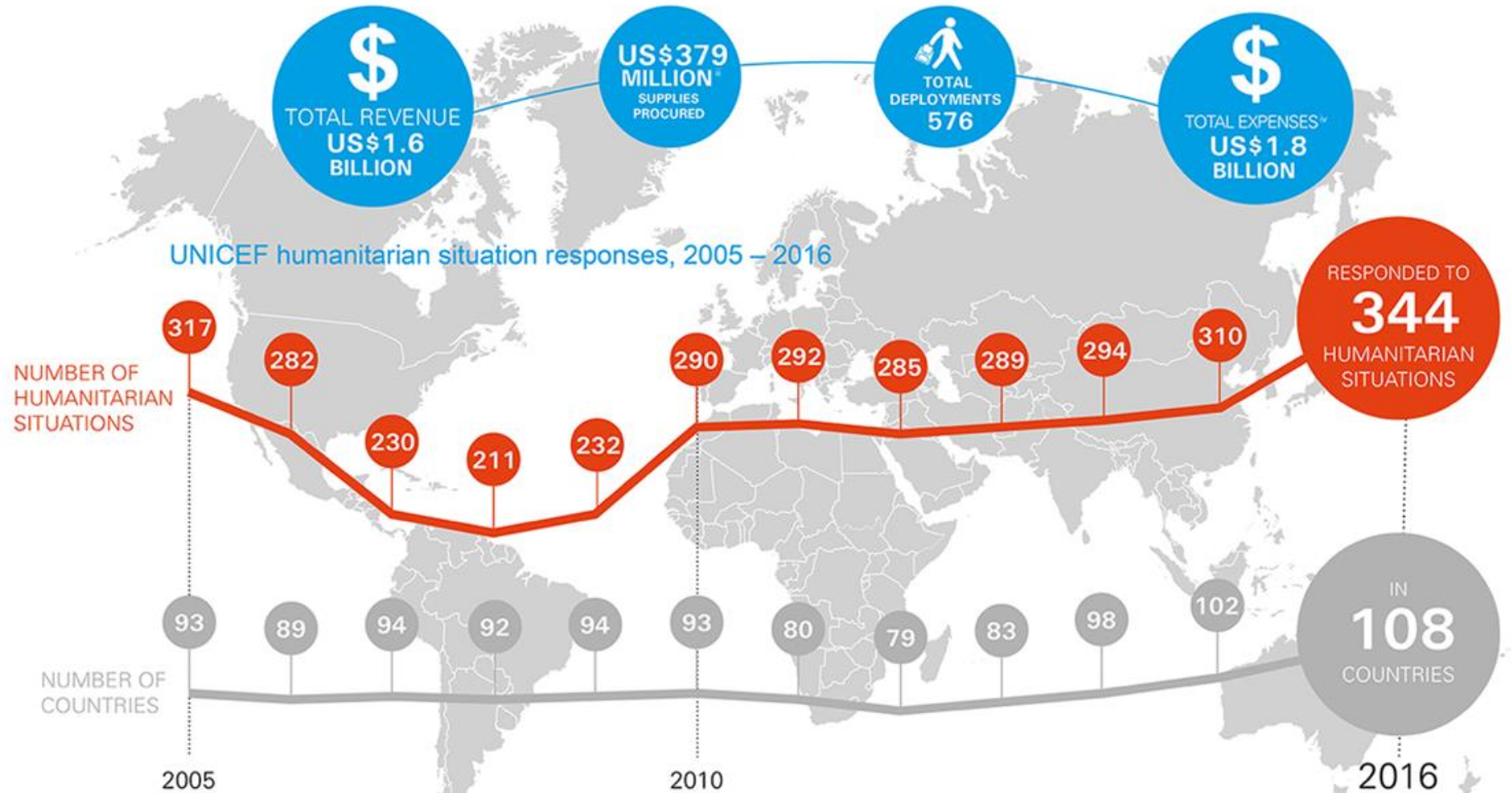
Emergency Global Response (I)

Global response in 2016

In 2016, 108 country offices¹ responded to 344 humanitarian situations, both the most ever since UNICEF began tracking in 2005¹¹.

Since 2010, UNICEF has responded to an average of over 300 humanitarian situations in nearly 90 countries each year.

The number of country offices responding is 37 per cent more than just five years ago (79 in 2012).



¹ Does not include responses where UNICEF does not have a country office, such as in parts of Europe.

¹¹ Data collection methodology based on country office phone interviews for 2005, country office questionnaire for 2006-2009, and country office annual report questionnaire for 2010-2016. Many of these are handled by UNICEF offices building off preparedness measures undertaken and using existing resources, highlighting the importance of UNICEF's presence before, during and after a crisis.

¹² This is the amount of other resources-emergency funded supplies and does not include services and supply procurement via programme cooperation agreements or direct cash transfers with partners. Supplies delivered against emergency orders totalled US\$142.3 million (for 62 countries), of which \$111.3 million (78 per cent) was funded by other resources-emergency.

¹³ Expenses exceeded revenue due to revenue being utilized over several years, based on the grant agreement, while expenses covers actual utilization in the calendar year. This is especially true in the case of multi-year funding agreements.

Emergency Global Response (II)

Type of response in 2016



This map is stylized and not to scale. It does not reflect a position by UNICEF on the legal status of any country or area or the delimitation of any frontiers. The dotted line represents approximately the Line of Control agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the Parties. The final boundary between the Republic of the Sudan and the Republic of South Sudan has not yet been determined.

¹ Including but not limited to refugee response.



Vaccine Procurement Overview



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UNICEF's Supply Management of Vaccines

The continuous changes in both supply and demand creates a dynamic market that requires continuous monitoring and management.

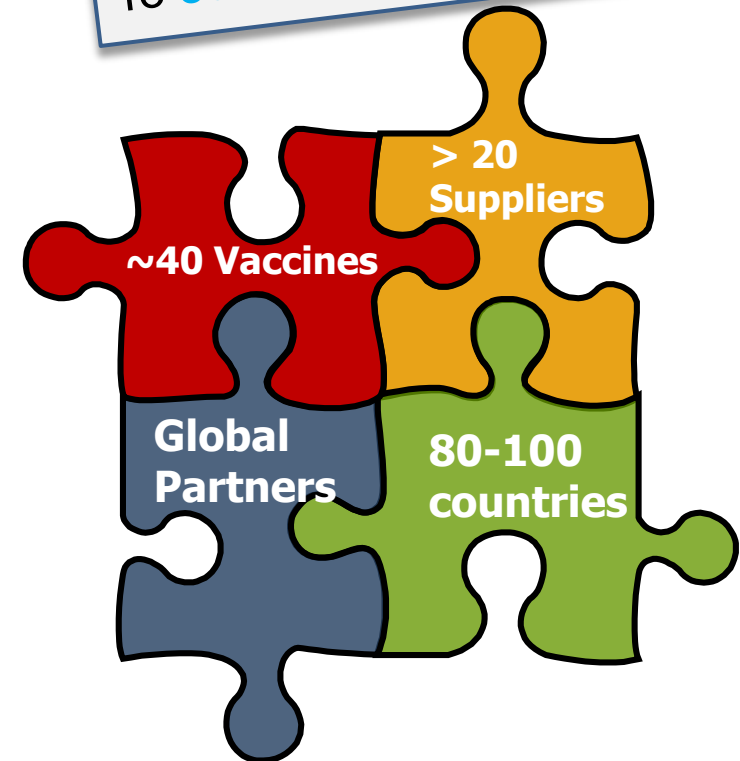
Systems are in place to monitor demand against supply and to report regularly both to manufacturers, countries and regional offices.

Internal coordination within Supply Division in the planning and procurement of vaccines, devices and cold chain for campaigns.

Strict guidelines and detailed coordination are applied to ensure the safe delivery of vaccines and the reporting of condition on arrival through the Vaccine Arrival Report.

UNICEF has the capacity to reallocate demand and supply between Countries and Suppliers, to avert crisis and level out demand fluctuations

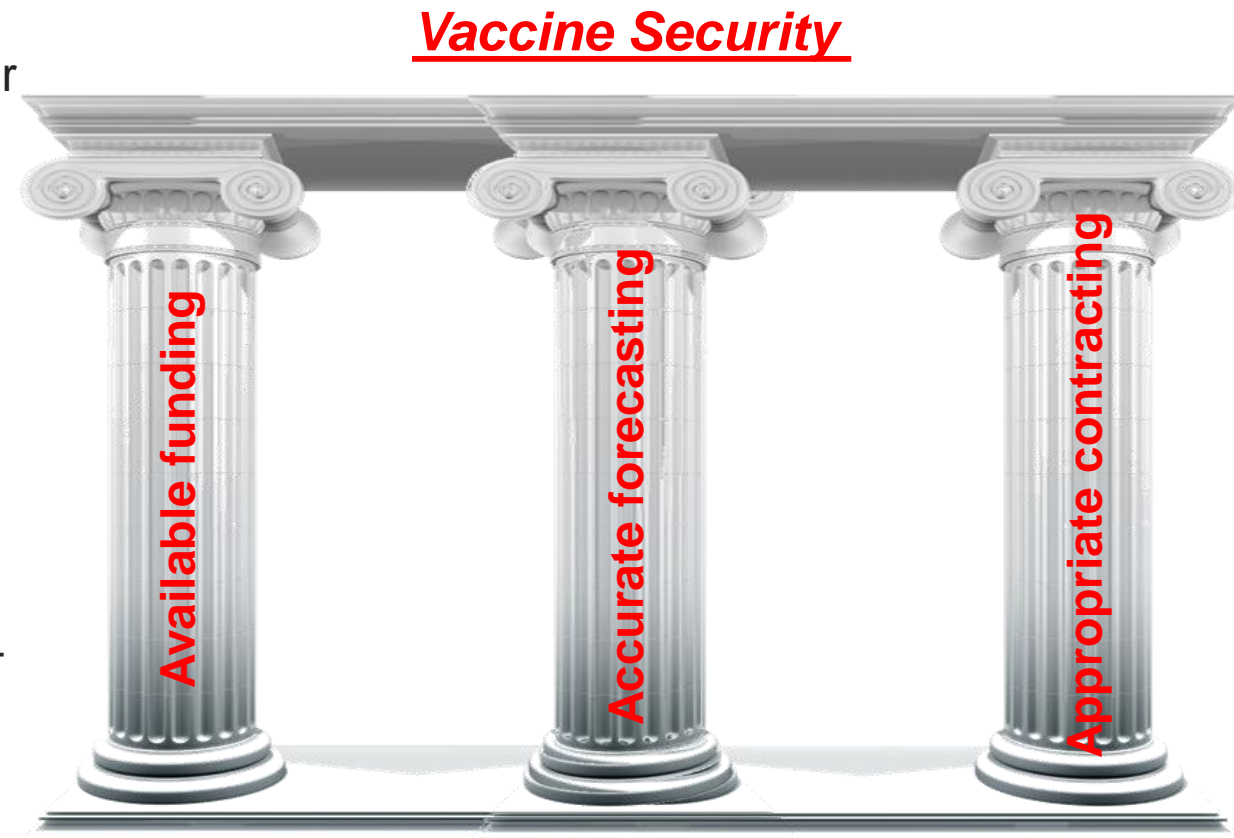
~ 40 Vaccines from ~ 24 Suppliers
~ 14 Immunization devices from ~ 8 Suppliers
To 80-100 countries



UNICEF's Procurement is Focused on Achieving Vaccine Security

Vaccine Security: the sustained, uninterrupted supply of affordable, vaccines of assured quality

- To achieve **value for money and access** to vaccines for children in need
- Achieving healthy markets through the **Vaccine Security** approach (forecasting, funding and appropriate contracting) and specific vaccine procurement principles
- Vaccines as **biological products** – requiring a specific approach for vaccine procurement
- Quality of vaccines through **prequalification by WHO** – ensuring acceptability, in principle, as well as quality, safety and efficacy in target population of procured vaccines



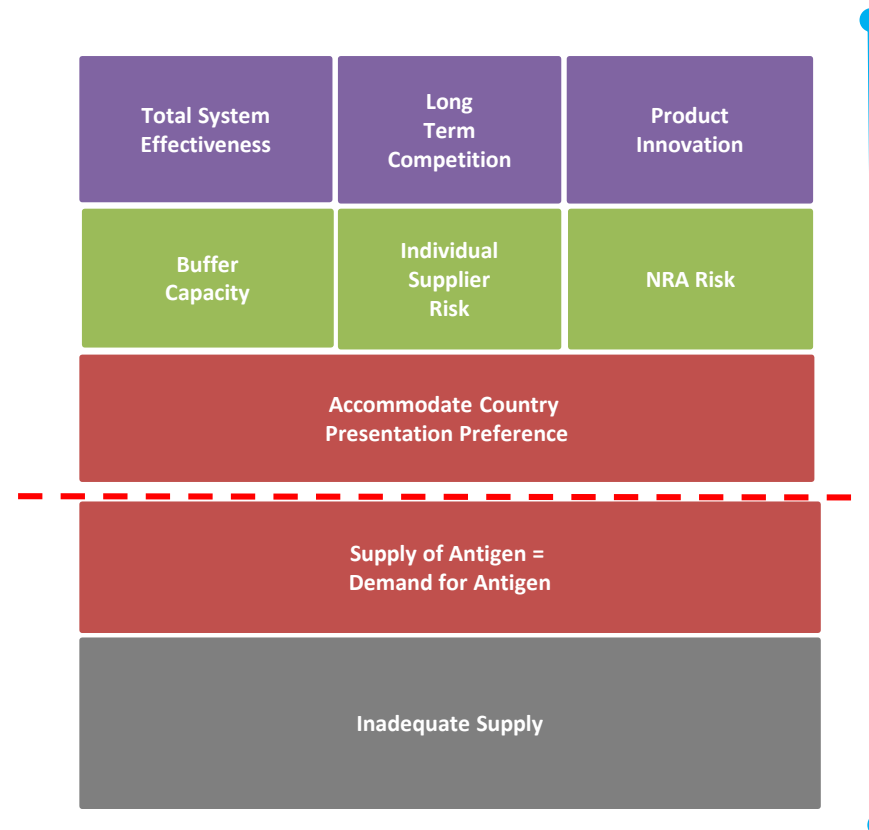
Healthy Markets Framework

HMF represents a set of attributes that should be used to measure the health of a market and a process to evaluate each attribute that is vaccine specific.

Process

- 1 Common building blocks to consider in every procurement
- 2 Selection and prioritization of which building blocks apply to a specific market usually via product roadmaps
- 3 Selection of what market needs could or should be resolved with non-procurement intervention
- 4 Quantification of the trade-offs implied by various scenarios and decisions associated with each healthy market building block

Framework



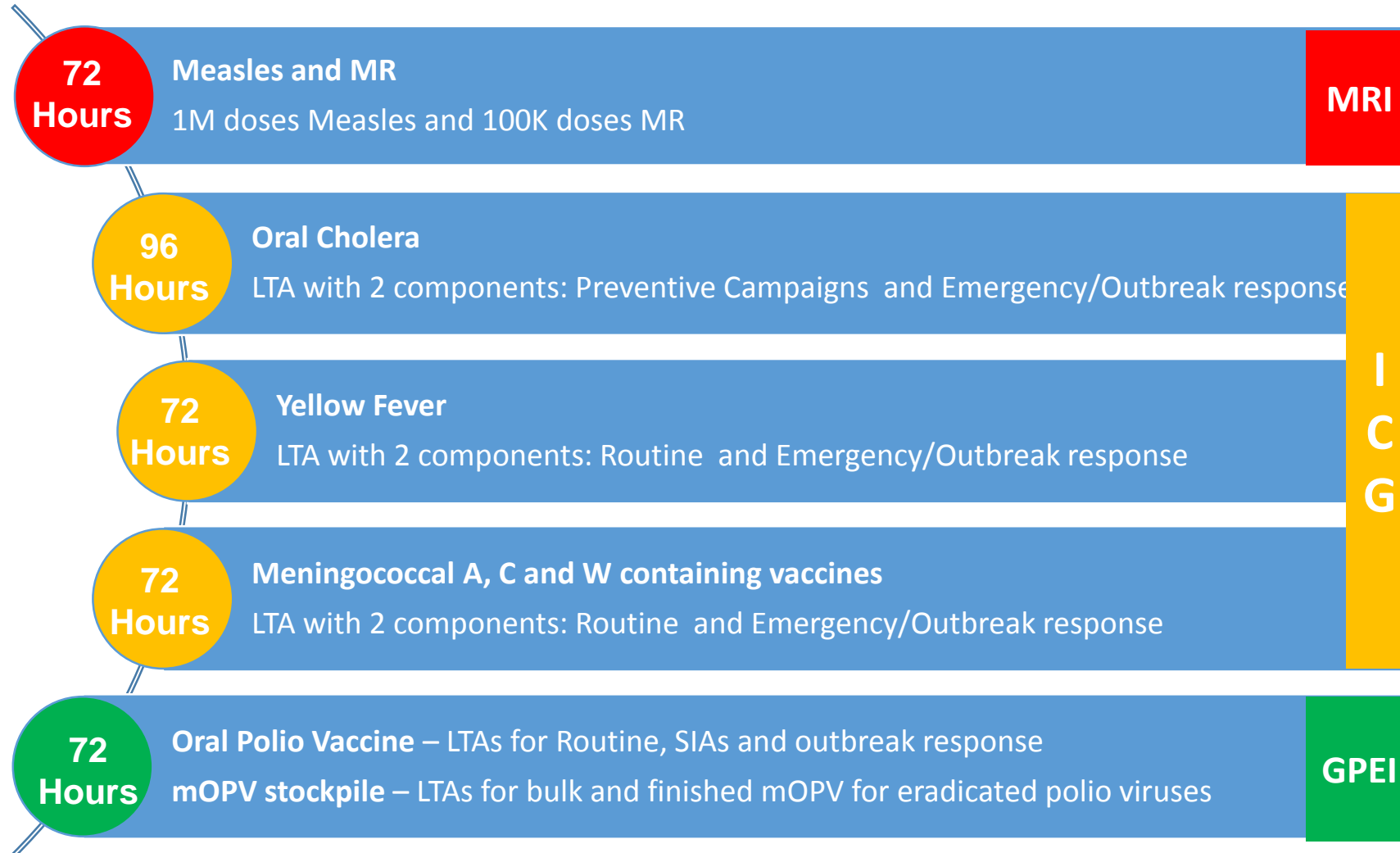


Vaccines in Emergencies



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Use of Vaccines for Emergency and Outbreak response



Considerations to access vaccines in emergencies

Availability of quality assured vaccines:

- UNICEF procures WHO prequalified vaccine
- If there is limited or no supply of prequalified vaccine, UNICEF has established criteria to ensure the quality of the product including:
 - The manufacturer must be WHO pre-qualified for supply of at least one other vaccine.
 - The vaccine must be licensed by the NRA in the country of origin, and this NRA must be functional (as assessed by WHO/RSS)
 - The vaccine must be registered in at least two additional countries with functional NRAs (as assessed by WHO/RSS).
- In emergency situation where there are no options that meet the criteria, we will procure with the approval of the recipient country and WHO endorsement

Product registration in country:

- Approval is required by country to permit the vaccine into country if there are no other options available; we must respect the NRAs; support from WHO if/as needed

Considerations to access vaccines in emergencies

No available vaccine in the market:

- Limited supply/supply constrained vaccines are managed by the ICG; this is not the case with OPV/Measles
- Stockpiling vaccine to ensure there is timely availability of vaccines, taking into consideration global market for vaccine and lead-times for production

Timely Supply of vaccine to respond to outbreaks:

- Stockpiling vaccines or our long term arrangement (LTAs) improve the availability of vaccines required for timely response;
- Forecasting needs will assist us to develop contractual agreements with suppliers or terms sheets for donations of vaccines in support of emergency use)
- Forecasting accuracy and contracting help to achieve affordable prices for vaccines

Managing high volume bOPV supply for routine, SIA calendar and a buffer for outbreak response

Outbreaks, production failures, market exits and regulatory issues have challenged supply in the past

- Forecast for 2013-2017 tender too conservative, with +65% increase in awards required post initial awards (4.9B to 7.7B)
- Market exit by one supplier, but new suppliers entering the market able to absorb
- Overall declining demand, with declared market exits from key suppliers

Risk mitigation in 2017, and moving forward

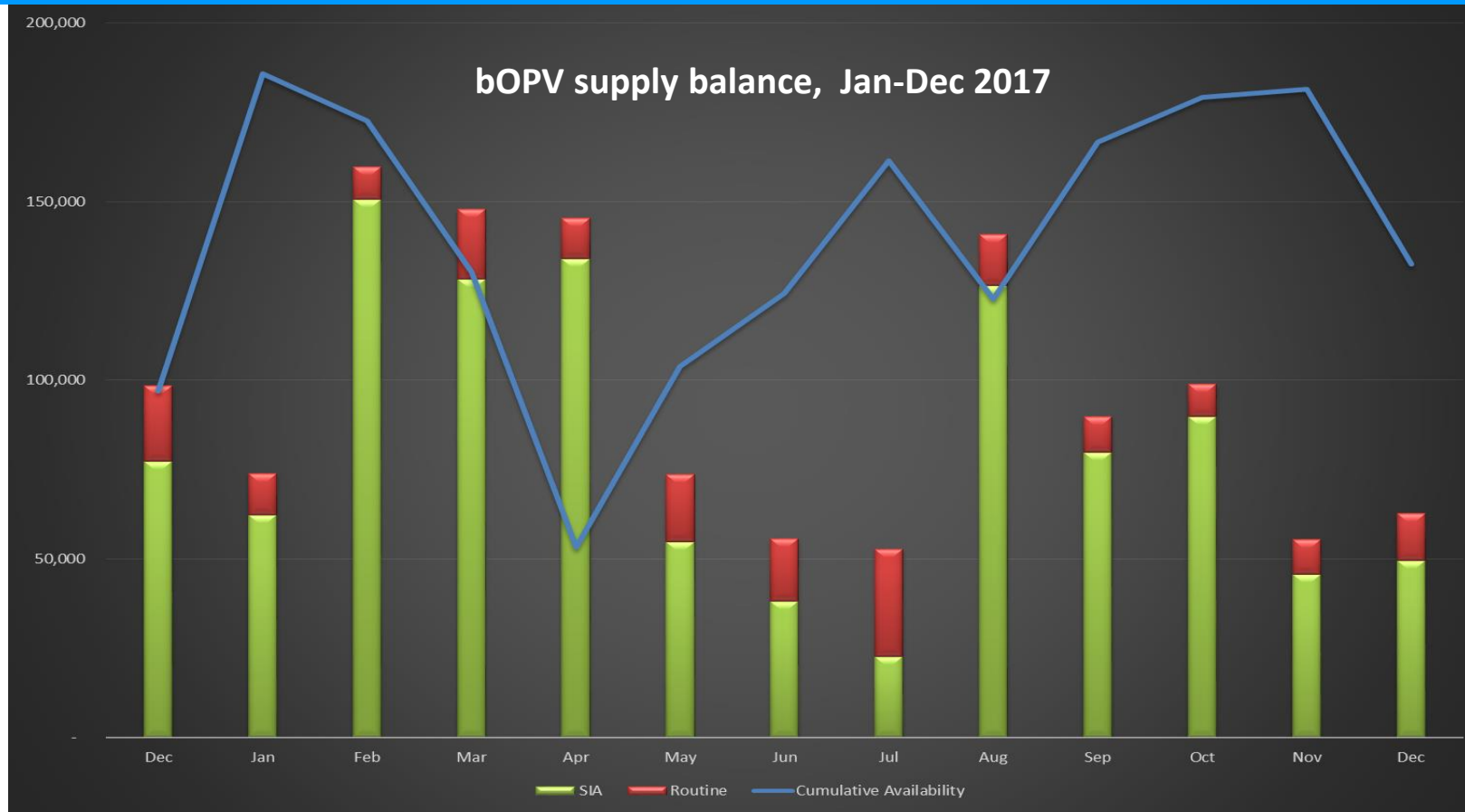
- 2017: Rolling buffer of finished product across all suppliers of up to 150Mds; 115Mds of bulk with manufacturer for immediate delivery with 3 months process time
- 2018 and beyond: i) Willingness to deliver 2Mds within 72 hours; ii) Capacity and willingness to store rolling buffer of OPV; iii) Willingness to secure bulk beyond awarded quantities; and iv) Willingness to extend contract beyond 2022



EPI

POLIO GLOBAL
ERADICATION
INITIATIVE

bOPV supply situation through to year end 2017 is sufficient to meet demand and 150Mds buffer



- Cumulative supply balance across all suppliers between 50-180Mds during 2017 to secure a buffer for outbreak response



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POLIO

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Preparing for the global polio eradication requires establishing stockpiles for outbreak response

mOPV2 stockpile a prerequisite for the global withdrawal of tOPV

- Bulk stockpiles of mOPVs established following tender in 2009
- mOPV2 as finished product to respond to outbreaks after cessation secured 2015
- mOPV1 and mOPV3 to be secured for the future bOPV cessation
- Unique from other stockpiles as no other usage and production (challenges estimating requirements, production to order – long lead times, no ability to ‘freshen’)

Delivery lead times to country in accordance with Protocol

- Within 5-7 days from time of WHO Director General notification
- Countries accountable to initiate response within first 14 days

Delivery lead times for freight forward pick up from purchase order

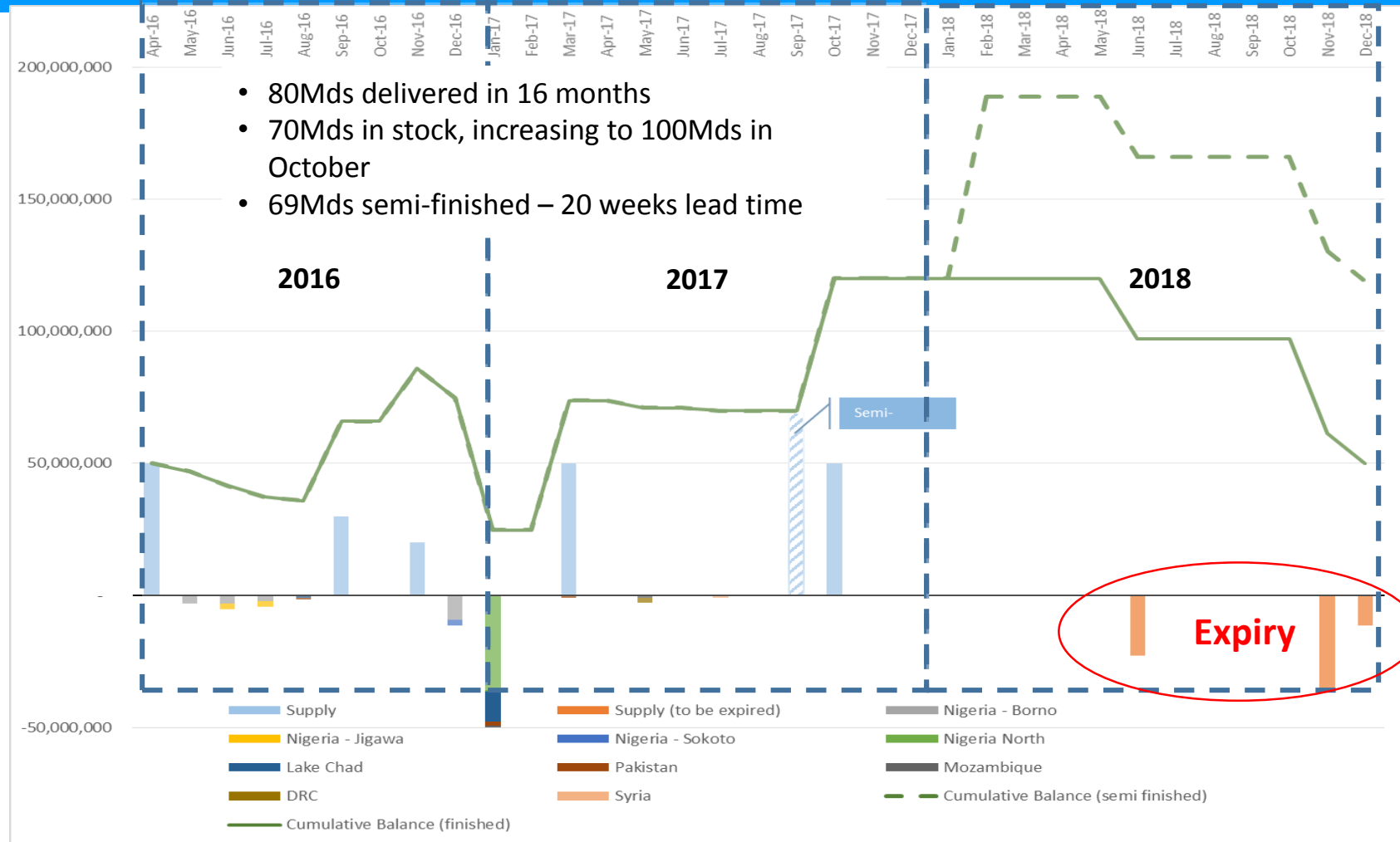
- 3 working days for getting vaccines ready



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Global stockpile of mOPV2 for immediate delivery to support country outbreak response against eradicated WPV2



- Unique challenge to ensure supply outside of a market context (long lead times, expiry, getting demand right)



Resources and Market Notes



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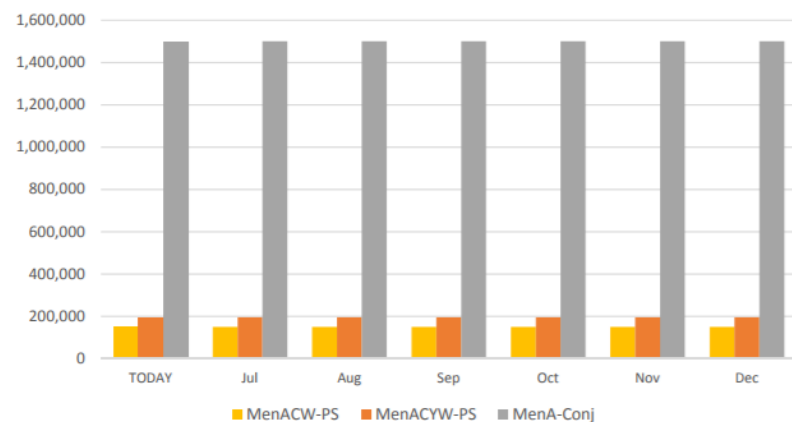
Visibility on stockpile levels: vaccines in constrained supply

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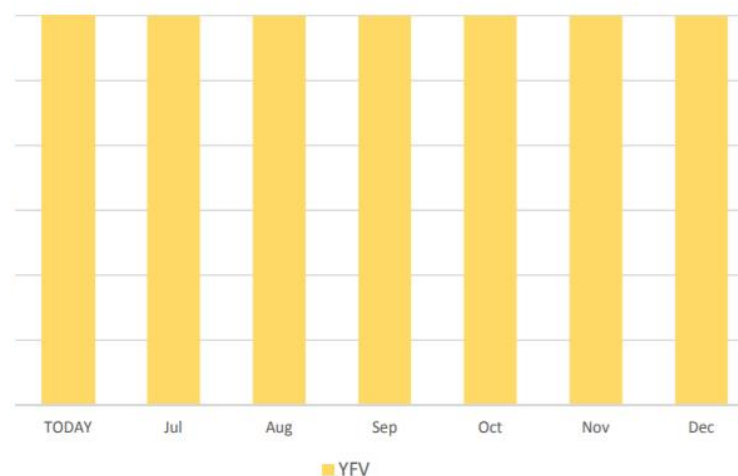
2017 Meningococcal Emergency Stockpile

09 July 2017



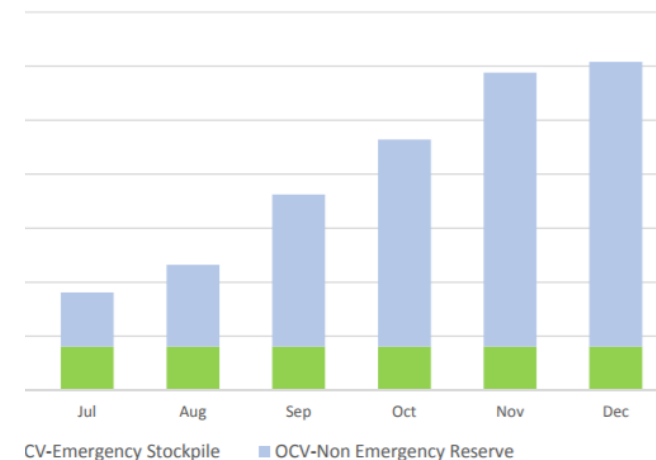
2017 Yellow Fever Emergency Stockpile

09 July 2017



2017 Cholera Emergency Stockpile

09 July 2017



Vaccine type	Presentation	Quantity available (doses)	Expiry date	WHO PQ	Cold Chain volume (sec.packaging) (cm3/dose)	Shipment costs *
MenACW-PS	10-dose vial	150,000	Feb.2019	No	2.50	\$0.040
MenACYW-PS	10-dose vial	194,700	Sep.2018	No	3.20	\$0.031
MenA-Conj	10-dose vial	1,500,000	Jun.2018	Yes	2.11	\$0.042
Total current availability		1,844,700				

* Estimated shipment cost per dose based on simulated order

This information is scheduled to be updated on 17 July 2017

Vaccine type	Presentation	Quantity available (doses)	Expiry date	WHO PQ	Cold Chain volume (sec.packaging) (cm3/dose)	Shipment costs *
YFV	10-dose vial	6,000,000	N/A	Yes	1.4 - 2.96	\$0.043
Total current availability		6,000,000				

Shipment cost per dose based on simulated order

This information is scheduled to be updated on 17 July 2017

Presentation	Quantity available (doses)	Expiry date	WHO PQ	Cold Chain volume (sec.packaging) (cm3/dose)	Shipment costs *
10-dose vial	1,253,449	N/A	Yes	11 - 16.8	\$0.129
Total current availability		1,253,449			

Shipment cost per dose based on simulated order

This information is scheduled to be updated on 17 July 2017

Information available on the UNICEF website



https://www.unicef.org/supply/index_57476.html



70 YEARS FOR EVERY CHILD

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WHAT WE DO ▾

WHERE WE WORK ▾

PRESS CENTRE ▾

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BLOGS

We're building a new UNICEF.org.

As we swap out old for new, pages will be in transition. Thanks for your patience – please keep coming back to see the improvements.

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Stockpiles

Vaccines Supply and
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Vaccine security

Vaccine Forecasting

Vaccine Price Data

Auto-Disable (AD)

Vaccine Price Data



© UNICEF/NYHQ2010-0775/Roger LeMoyné

UNICEF has a significant role within vaccine procurement for children. In recognition of this and to provide greater transparency, UNICEF is now publishing historic, current and future awarded prices for vaccines.

This overview has 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.

Prices posted are based on CPT Incoterms for the period 2001 – 2003 and FCA nearest international airport Incoterms from 2004 and payment terms are 30 days net, unless otherwise specified.

For your reference, historical procurement data per vaccine in terms of quantities in doses and USD values is available [here](#).

The below links provide an overview of prices contracted with suppliers by UNICEF per vaccine.

LATEST NEWS: New [Pentavalent price data](#) now available. Read full [Press Release](#) 19 October 2016

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Publications on Products & Markets for key vaccine supplies



- **Market notes** available at:
http://www.unicef.org/supply/index_vaccines.html
- **Format**
 - Market & Supply Updates
 - Product Specifications
 - Availability and Guidance
- **Aims**
 - Primary: To inform demand (e.g. from COs and Governments)
 - Secondary: To provide market signals
- **Content**
 - Analysis of UNICEF procurement data to illustrate market trends.
 - Narrative to articulate critical issues and improve situation
- Updated ~6 months or as needed

Information available on the UNICEF website

 http://www.unicef.org/supply/index_immunization.html

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Immunization



© UNICEF Lao DPR/2007/Holmes

Lao DPR: A girl winces as she receives a measles injection at Don Na Souk Primary School in a suburb of Vientiane.

Vaccines and micronutrient supplementation save millions of lives each year. Almost every child can be reached with vaccines and supplements, even under the most difficult circumstances. UNICEF is the leading agency for vaccine procurement. In 2013, UNICEF procured vaccines worth \$1.286 billion. For more information please click [here](#).

UNICEF Supply Division is responsible for buying all

Latest

[Vaccine Industry Consultation 8th and 9th October 2014](#)

[Measles-containing vaccines market update](#)

[UNICEF presentation to India Vaccine Summit March 2014](#)

[Current IPV Supply and Recent Tender Results](#)

[Vaccine Price Data](#)

[Oral polio vaccine supply update](#)

[Market update: Pneumococcal conjugate vaccine supply](#)

[Developing Countries Vaccine Manufacturers Network \(DCVMN\)](#)

[Cold Chain – Solar Direct Drive Refrigeration Systems Industry
Consultation Meeting 1-2 Oct 2013](#)

[BCG supply and demand update](#)

[Rotavirus supply and demand update](#)



THANK YOU

