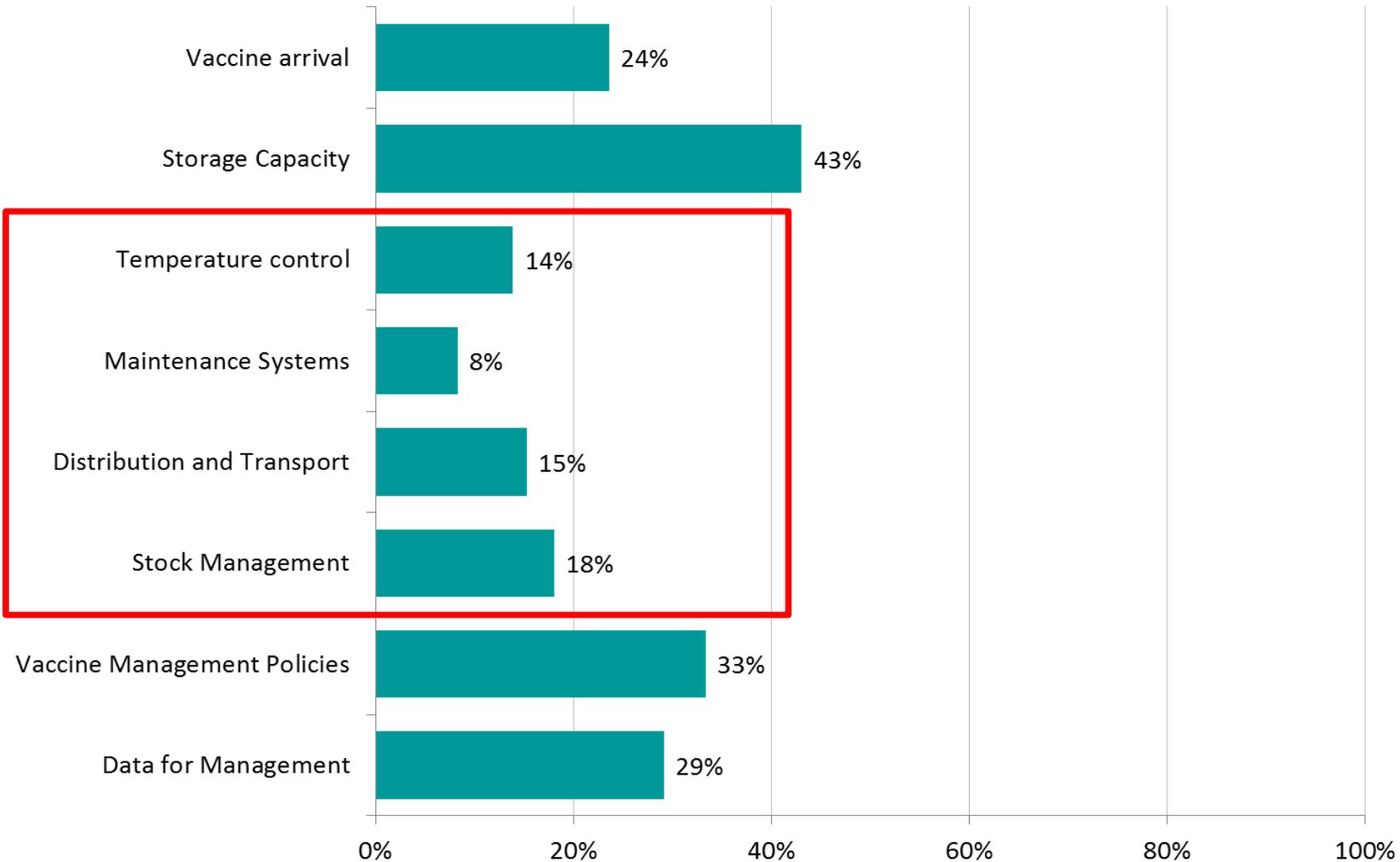




# Ensuring the Basics are Fixed: Vaccine Management Best Practice

# Basic vaccine management is a concern

## EVM Assessment Findings in 70 Countries



Source: WHO (2015)

% of Countries achieving the minimum standard recommended for EVM

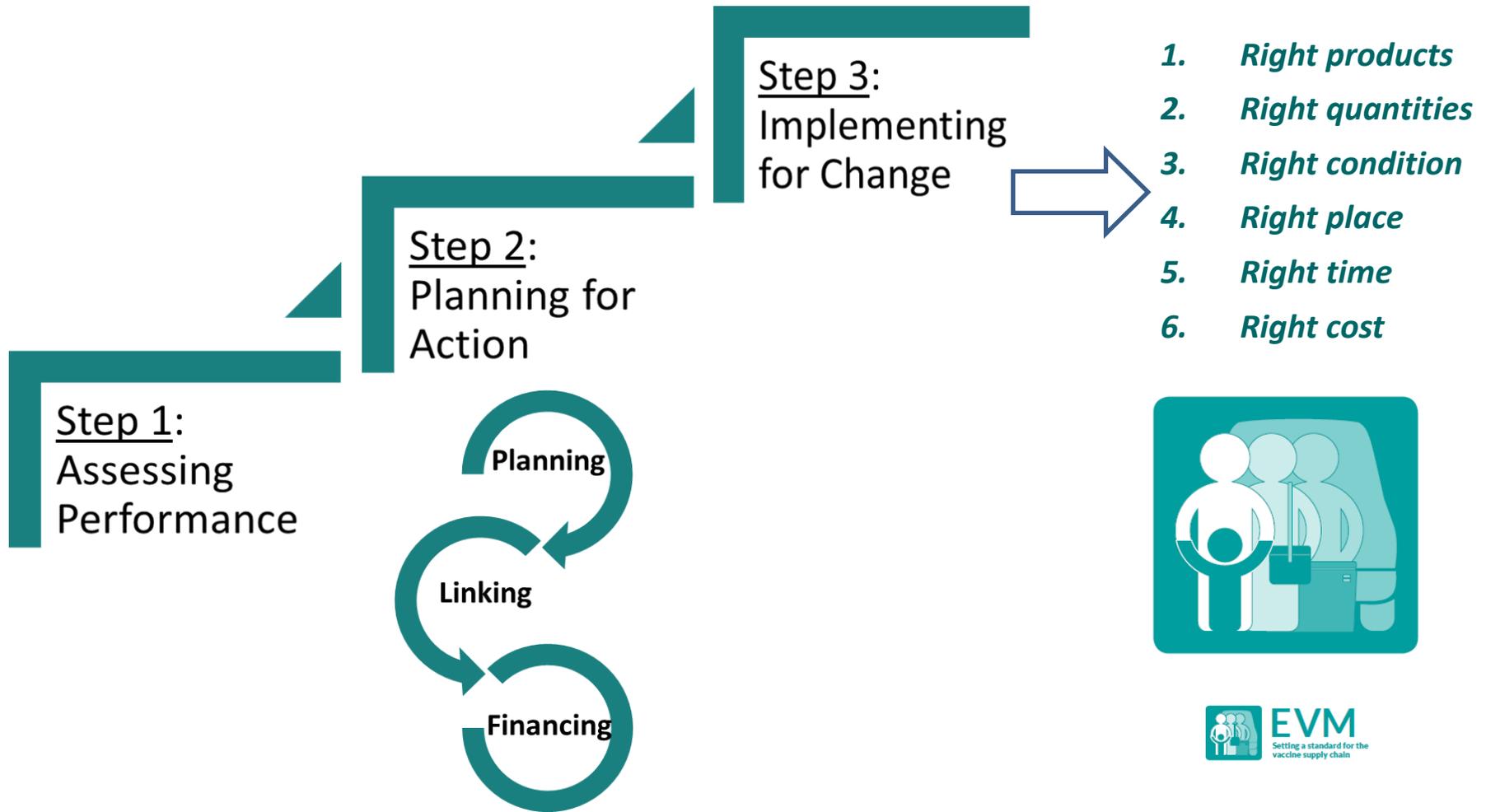
**Network design, system optimization  
and innovations are important . . .**

... but performance on a poor foundation is wobbly

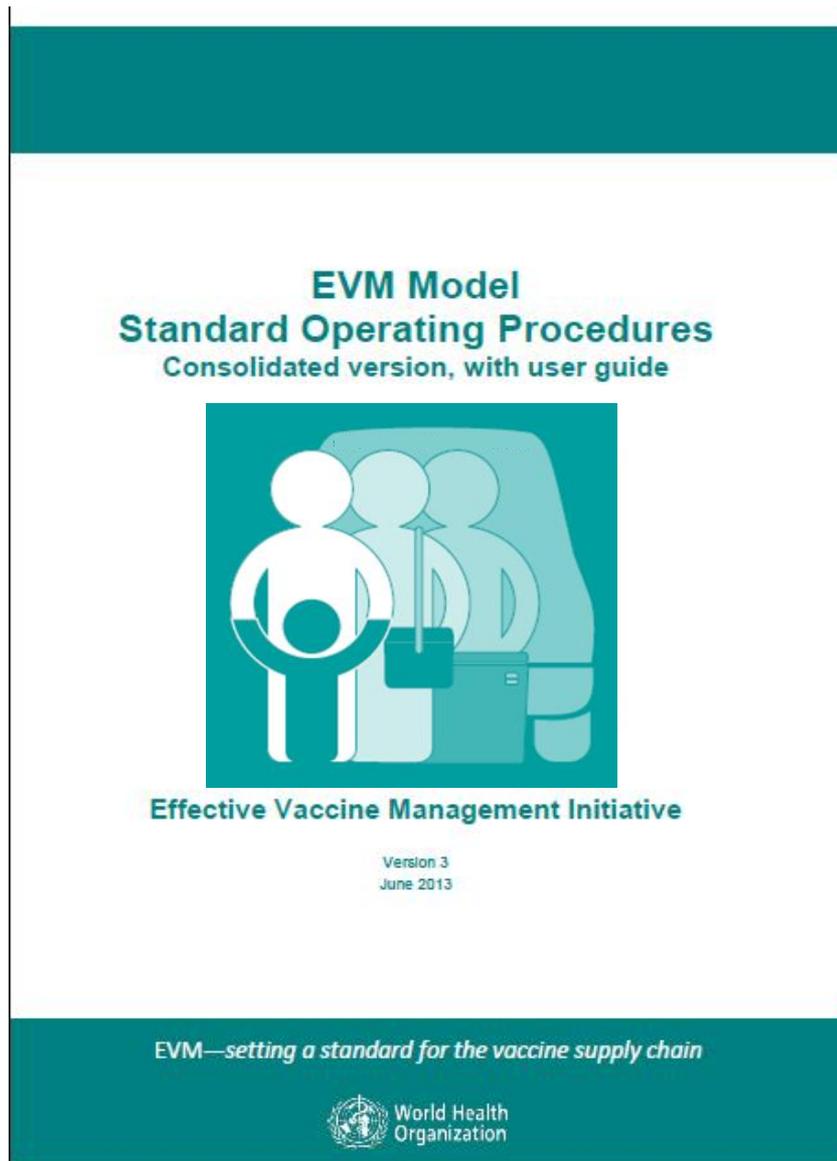


# Comprehensive EVM Initiative

Essential component of WHO/UNICEF strategy for immunization supply chain strengthening in-country: Fixing the basics + innovation



# Back to basics: EVM Standard Operating Procedures



TOPICS	SOPs
E1. Vaccine arrival	3
E2. Temperature monitoring	3
E3. Storage capacity	2
E4. Buildings Equipment Transport	1
E5. Maintenance	6
E6. Stock control	8
E7. Distribution	6
E8. Vaccine Management	2
E9. General Programme Management	3

# UNICEF cold chain support package (CCSP)



- **Provides commercial and technical information to enable an efficient and effective procurement process for Cold Chain products and service**
- **Series of Eight Modules**

**General Procurement Guidelines**

**Walk-in Cold Rooms and Freezer Rooms**

**Compression Systems Refrigerators and Freezers**

**Battery Powered Solar Refrigerators and Freezers**

**Temperature Monitoring Devices**

**Solar Direct Drive Refrigerators and Freezers**

**Vaccine Carriers and Cold Boxes**

**Voltage Regulators and Stabilisers**

# Updated Guidance Materials

WHO Polio  
Multi-dose  
Revision 2014

HANDLING OF



## Vaccine vial monitor (VVM) assignments for different WHO-prequalified vaccines and their proper handling

### INFORMATION BULLETIN – July 2014

This information bulletin addresses the varied implications of different types of vaccine vial monitors (VVMs), notably VVM category type 7 (VVM7) and VVM category type 14 (VVM14), on vaccines such as the Inactivated Polio Vaccine (IPV) and the fully-liquid Diphtheria-Tetanus- whole cell Pertussis-Hepatitis B-Haemophilus influenzae type b (DTP-HepB-Hib, commonly referred to as pentavalent). The note is directed to countries that are currently supplied by UNICEF Supply Division with these specific presentations of vaccine. The information is intended for WHO/UNICEF staff, as well as EPI managers or other partner agencies which support immunization programmes.

#### I. Summary

Different VVM types present important implications for the handling of a given vaccine. The VVM category assigned by WHO reflects the respective heat stability of the vaccine. In this information note, vaccine products with a lower VVM assignment will naturally reach their discard point more quickly than those with a higher VVM assignment, even when stored within the +2°C to +8°C temperature range. Countries should be alert to the type of vaccine product they receive and are handling so that effective vaccine management measures are in place to preserve the life of the VVM for as long as possible.

#### II. VVM assignments for IPV and DTP-HepB-Hib

At the time of this Information Note, Table 1 lists the IPV and DTP-HepB-Hib vaccine products prequalified by WHO. Most pentavalent vaccine presentations come with a VVM of the thermostability category type 14, or VVM14. However, there is one vaccine product which is currently pre-qualified with a thermostability category type 7, or VVM7.

### Handling and Use of

#### Handling and use of vaccine

**Vaccine Diluents**  
... (powder) vaccine in order to ...  
... vaccine for administration. A ...  
... before requir...

... by the ...  
... Some diluents ...  
... contain stabilizers and ...  
... place the diluent assigned by the

#### of vaccine diluents

... vaccine, they should always be ...  
... is +2°C to +8°C. In the event that ...  
... not packaged with the vaccine can ...  
... er's instructions allow it. However, ...  
... regarding cooling prior to

... freeze-sensitive ingredients. If ...  
... an adjuvant or a freeze sensitive ...  
... ducting the shake test.



# Updated Guidance Materials

2. The vaccine cold chain

## 2 The vaccine cold chain

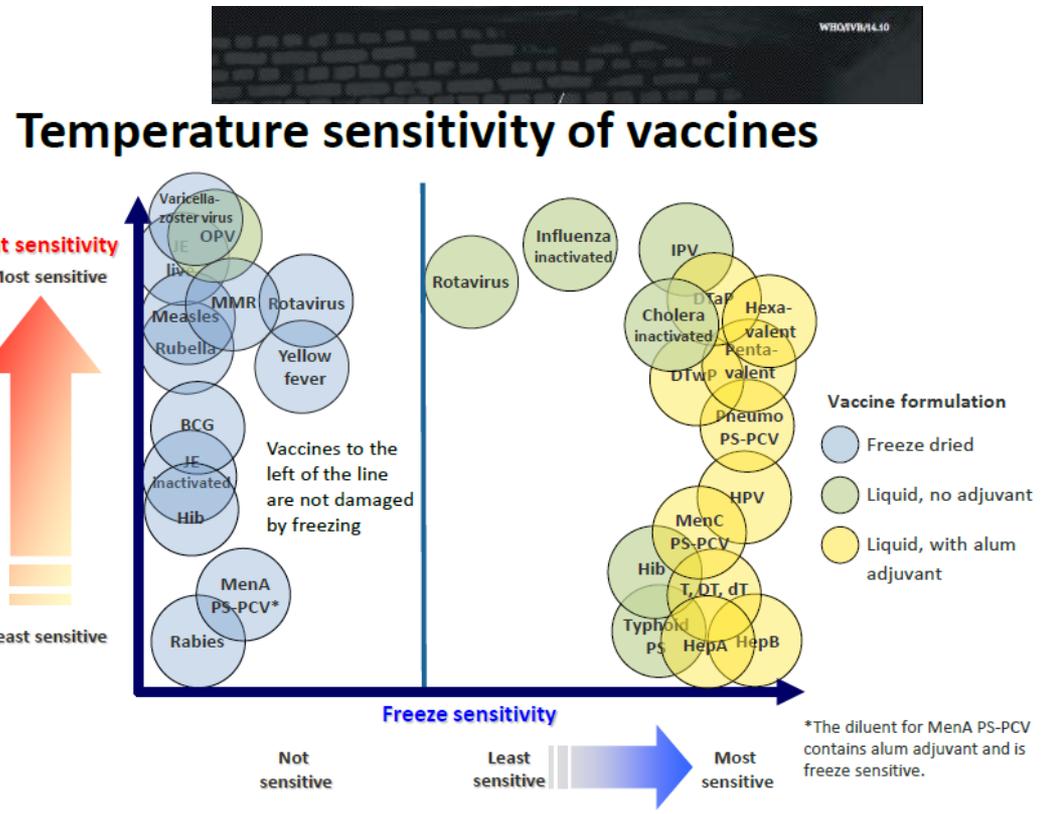
*About this module...*

The purpose of the vaccine "cold chain" is to maintain product quality from the time of manufacture until the point of administration by ensuring that vaccines are stored and transported within WHO-recommended temperature ranges.

This module provides guidance for workers at health facility level. It covers the use of cold-chain and temperature-monitoring equipment and the basic maintenance of cold chain equipment. The module describes the existing range of WHO prequalified equipment at the time of publication. Up-to-date information on prequalified equipment is available on the WHO Performance Quality Safety (PQS) website ([http://apps.who.int/immunization\\_standards/vaccine\\_quality/pqs\\_catalogue/](http://apps.who.int/immunization_standards/vaccine_quality/pqs_catalogue/)).

Some of the figures in this module show equipment from specific manufacturers. This is for illustrative purposes only and does not indicate WHO official endorsement of these products.

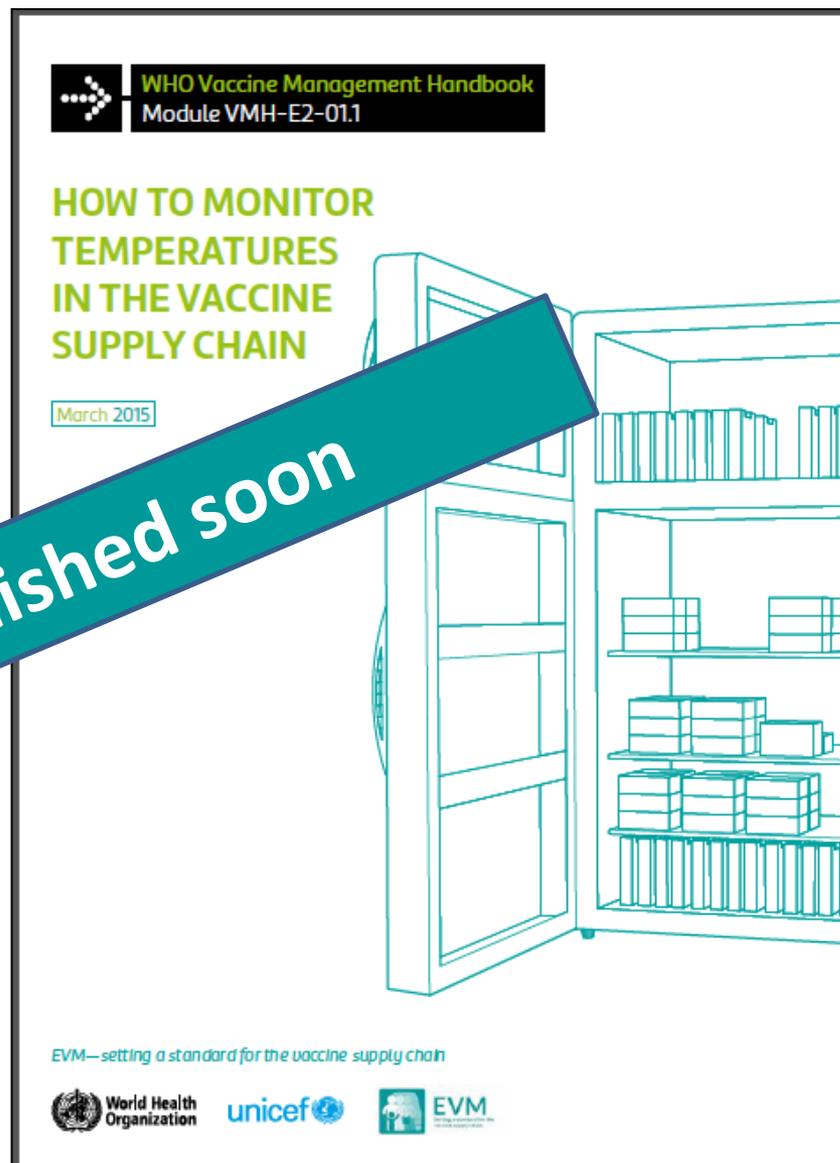
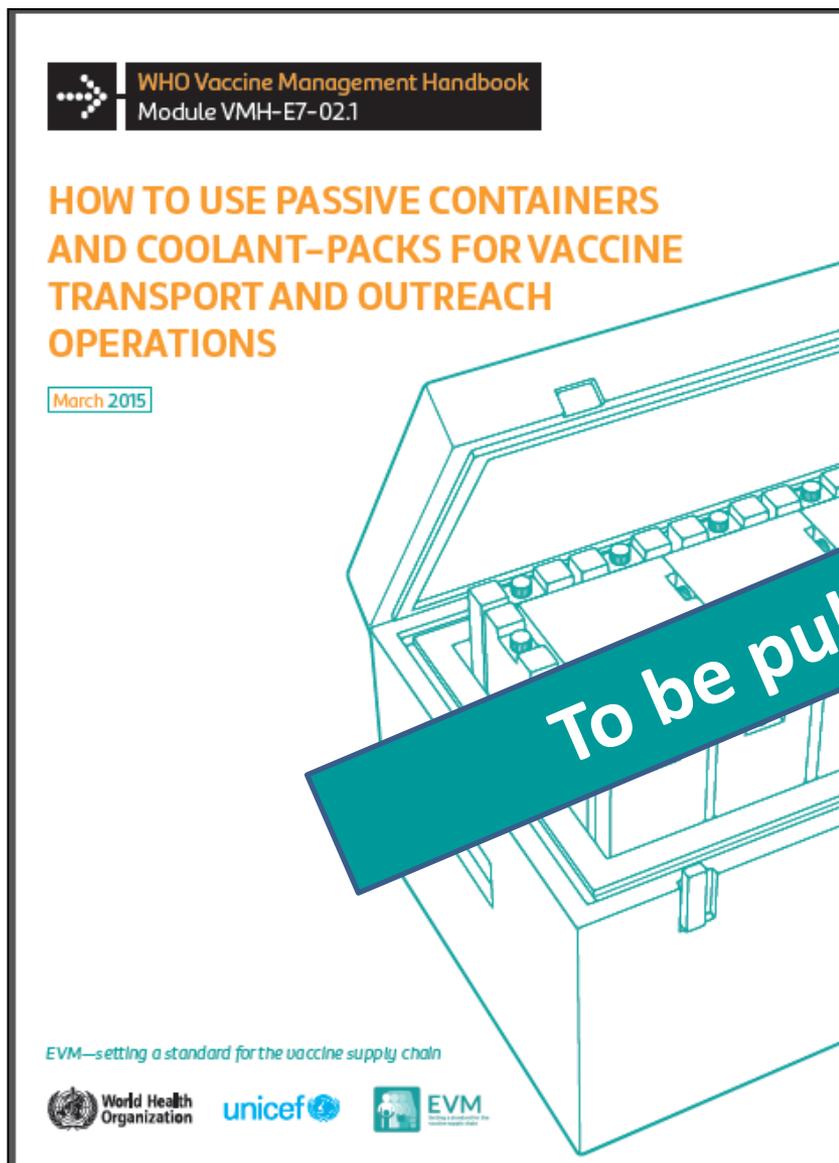
Downstream: Immunization in Practice, 2015



"Bubble chart", 2014  
 DEPARTMENT OF IMMUNIZATION, VACCINES AND BIODIAGNOSTICS  
 World Health Organization

Upstream: Assessing the programmatic suitability of vaccine candidates for WHO prequalification, 2014

# New Guidance Materials: Vaccine Management Handbook



# E-learning

Browser tabs: <https://mail.google.c...>, <https://www.google...>, <http://www.tripadvis...>, <http://www.tripadvis...>, [Vaccine Carriers and](#), [EPELA](#), [www.epela.net/epela...](http://www.epela.net/epela...)

Address bar: [www.epela.net/epela\\_web/evvm.html](http://www.epela.net/epela_web/evvm.html)

Page Header: **EPELA** extensio et progressio / authentic e-learning | **e-VVM Based Vaccine Management Course** | World Health Organization

Video Player: **e-VVM course introduction** from EPELA PLUS | **VVM based vaccine management** Authentic e-learning course | **INTRODUCTION** | EPELA | World Health Organization | GLO/VQ | 03:15 | HD :: vimeo

Right Sidebar: Mentors, Who said what, Credits, Apply online, Sponsors, Collaborators

Bottom Navigation: Introduction Video, Learning Objectives, Programme, Document Library, Video Library | BACK | FORWARD

Taskbar: <https://vimeo.com/epela> | EN | 01:42 12/05/2015

[http://www.epela.net/epela\\_web/evvm.html](http://www.epela.net/epela_web/evvm.html)

# New Guidance Materials under development: Still to come....



## EVM Handbook Series

- **How to Manage Stocks Effectively**
- **How to Forecast Vaccines**
- **How to Calculate Vaccine Volumes & Capacity**
- **How to Develop Preventive & Repair Maintenance Systems**

# Conclusion

- **Management of immunization supply chain and logistics has grown increasingly complex**
- **Concerted efforts to develop resource and guidance materials to inform decision-making**
- **Help countries consolidate the essentials in order to enable them to innovate**
- **The greater challenge is in implementation of practice**

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