



NEGLECTED TROPICAL DISEASE
NGO NETWORK

A global forum for nongovernmental organizations
working together on NTDs

Welcome to the NNN Conference 2020

Accelerating to 2030:
Building Resilient NTD
Programmes in a
Changing World

With thanks to our
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Virtual Event

8th – 10th September 2020

Billy Weeks (2016, Chikwawa, Malawi)



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**NEGLECTED TROPICAL DISEASE
NGO NETWORK**

A global forum for nongovernmental organizations
working together on NTDs

4.4. The End to End Supply Chain: Working Together Towards a Successful Supply Chain Strategy to beat NTDs

September 10, 2020

- **Cassandra Holloway, Children Without Worms | TFGH**
- **Dr Afework Tekle, WHO Geneva**
- **Modeste Tezembong, WHO ESPEN|AFRO**
- **Tijana Williams, GSK**



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Overview:

Introductions and the importance of NTD End-To-End Supply Chain

Overview NTD First-Mile Supply Chain

Practical Session on the Tools of NTD First-Mile Supply Chain

Overview of the NTD Last-Mile Supply Chain

Breakout Sessions



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Medicines of the NTD PC End to End Supply Chain

ALBENDAZOLE (ALB)

Company: GlaxoSmithKline

Donation start date: 2000 (lymphatic filariasis), 2012 (soil-transmitted helminthiases)

Diseases treated: Lymphatic filariasis: up to 600 million tablets annually committed until elimination of disease; soil-transmitted helminthiases: limited to 400 million tablets per year

Sites of production: Nashik, India, and Cape Town, South Africa

IVERMECTIN (IVM)

Company: Merck Sharp & Dohme (MSD)

Donation start date: 1987 (onchocerciasis), 1998 (lymphatic filariasis)

Diseases treated: Lymphatic filariasis: as much as needed for as long as needed, currently 395 million tablets per year; onchocerciasis: as much as needed for as long as needed, currently 178 million tablets per year and in areas co-endemic for lymphatic filariasis and onchocerciasis, 218 million tablets

Site of production: Haarlem, Netherlands

AZITHROMYCIN (ZTH)

Company: Pfizer

Donation start date: 1999

Disease treated: Trachoma, in 2016, 120 million doses were donated

Site of production: Puerto Rico (tablets); Italy (paediatric oral suspension)

DIETHYLCARBAMAZINE (DEC)

Company: Eisai Pharmaceuticals India Pvt Ltd

Donation start date: 2014

Disease treated: Lymphatic filariasis, commitment for 2.2 billion tablets until 2020

Site of production: India

MEBENDAZOLE (MBD)

Company: Johnson & Johnson

Donation start date: 2010

Disease treated: Soil-transmitted helminthiases, commitment for up to 200 million tablets per year until 2020 for school-age children

Site of production: Portugal

PRAZICUANTEL (PZQ)

Company: Merck

Donation start date: 2008

Disease treated: Schistosomiasis, donation increasing progressively to up to 250 million tablets per year for an unlimited period

Site of production: Mexico





The *NTD Supply Chain Forum* focuses on the delivery of NTD donations from the manufacturer to the country central medical stores (*First Mile*) and responds to potential in-country supply chain management and distribution areas where further support may be required (*Last Mile*).



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End-To-End Supply Chain



The NTD End-To-End Supply Chain



SUPPLY CHAIN: THE END-TO-END FIGHT AGAINST NTDS
<https://www.youtube.com/watch?v=NhEUwHO3SQk>



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Overview of the First-Mile Supply Chain

Country Drug Forecast



- Utilized by the donation programs (WHO/ITI/MDP/Other)
 - Prioritize orders
- Utilized by Pharma Donors
 - Secure capacity
 - Active pharmaceutical ingredient (API)
 - Manufacturing schedule
 - Shipment plans

Order Received by Pharmaceutical Donor



- Order processed by pharma company
- Notification of pending shipment
- Medicine are produced, labelled, and packed for the order.

Request of Green Light from the Consignee

- Consignee Approval to Ship
 - Container inspection.
 - Import permits.
 - Complicated clearance process.
 - Limited Central Medical Store or national warehouse.

Zithromax® Shipment Green Light Checklist		Yes/ No
Communication	Are the Customs agents aware of the shipment and the quantity of the shipment?	
Customs Duty Waiver	Has the Customs duty waiver been prepared?	
Customs Clearance & Handling Costs	Are the funds ready to pay Customs clearance and handling costs for the inbound shipment?	
Warehouse Space	Does the Central Medical Store have space to receive the shipment?	
Distribution	Is the country prepared to distribute the Zithromax®?	

Source: International Trachoma Initiative. Zithromax® Management Guide 2019. Atlanta: International Trachoma Initiative: Pg 9, <https://trachoma.org/zithromax-management-guide>

Green Light from the Consignee

DONOR SHIPPING DOCUMENTS



- Key Documents
 - Certification of Analysis
 - Certificate of Donation
 - Certificate of Origin
 - Invoice and No-Cost Invoice
 - Packing List
 - Airway Bill *

* the sea freight Bill of Lading is not available with the Green Light documents

Transportation Process (Sea/Air)



- Donor books transportation of shipment with Freight Forwarder.
- Freight Forwarder provides shipping details to donor.
- Shipping advice provided to consignee.
 - Sea freight Bill of Lading is included at this time.

Consignee Clearance Documents



- Consignee applies for Customs clearance documents, Port (sea/air) and or Border
 - Example of documents
 - Tax Exemption waiver
 - Federal Ministry of Finance waivers
 - Ministry of Health stamp of approval of shipping documents
 - Others

It is the responsibility of each country that receives NTD PC medicines to identify and obtain country specific documents that are required to clear a shipment through customs

Consignee Clearance Documents (continued)



- Resources for obtaining the list of documents and their required processes.
 - MoH shipping logistics officer
 - National medical store logistics officer
 - Local freight forwarder
 - Freight forwarder that provided previous shipment.

Consignee Clearance Documents (continued)

- Why is this important?



- Delay in providing shipments on time for MDAs.
- Concerns over the safety of stock detained in customs.
- Additional costs to the Consignee, WHO or the Donor for the delays.

Consignment Cleared Through Customs

- Freight Forwarder completes customs clearance.
 - ✓ Donor shipping documents
 - ✓ Consignee clearance documents
- Freight Forwarder books transpiration to nation medical store.



Transportation to Central Medical Store



- Donor's responsibilities for ALB, IVM, MEB, PZQ.
- Consignee's responsibilities for DEC and Zithromax.

Transportation to Central Medical Store (continued)



- Consignee responsibilities:
 - Offloading of shipment from trucks
 - Truck Demurrage for delays in offloading.



Tools of the First–Mile Supply Chain




The Zithromax[®]
Shipment Tracker

NTDeliver

The instant tracking of select NTD PC medicines from receipt of the order by donors, to the fulfillment of the order, and then the final delivery to the country.

Online www.ntdeliver.com/country or Subscription www.ntdeliver.com/subscribers/new



Country Summary

- Select Country -

Afghanistan

American Samoa

Angola

Argentina

Azerbaijan

Bangladesh

Benin

Bhutan

Botswana

Brazil

Bulgaria

Burkina Faso

Burundi

Cambodia

Cameroon

Cape Verde

CAR

Chad

Colombia

Comoros

Congo

Cook Islands

Côte d'Ivoire

Denmark


Dominican Republic

DPR Korea

DRC

Egypt

El Salvador



Country

About

Click here to review guidance from WHO regarding the COVID-19 outbreak and implementation of NTD programmes

Nigeria

Subscribe to Shipment Status

Switch Country Selection

- Select a Country -

Indicators*

STH SAC Population requiring PC (as of 18-Dec-2018) 27.3 Million

STH Pre SAC Population requiring PC (as of 18-Dec-2018) 19.5 Million

SCH SAC Population requiring PC (as of 10-Dec-2018) 16.8 Million

SCH Adult Population requiring PC (as of 10-Dec-2018) 24.8 Million

*Source: WHO PCT database
Data last updated on: 14-Nov-2018

Map of Nigeria

Purchase Orders

To view a more detailed PO Tracking Report, click on the PO Number. The PO Tracking Report contains more information about each order, and allows you to make notes about the order.


2019 X 2020 X X LF X SCH X STH X X ALB X AZM X DEC X X MEB X PZQ X X PO Number X

Show/Hide Columns

Showing 1 to 10 of 12 POs (filtered from 2,216 total POs)

Stage	Year	Drug	Quantity	Packing List Received	Actual Shipment Date	Actual Arrival Date	Actual Delivery Date	Mda Date	Programme
Estimated Shipment Arrival	2019	LB	26,000,000	31-Jan-2019	20-Jul-2019	16-Aug-2019	07-Oct-2019	01-Apr-2019	LF
Estimated Packing Completion	2019	LB	30,000,000	20-Dec-2018	20-Jul-2019	16-Aug-2019	24-Oct-2019	01-Apr-2019	LF
Packing List Received	2019	ZQ	36,981,000	30-May-2019	12-Jun-2019	04-Aug-2019	25-Oct-2019	01-Jul-2019	SCH
Actual Shipment Date	2019	LB	28,140,000	05-Nov-2019	24-Dec-2019	24-Jan-2020	24-Feb-2020	01-Apr-2020	LF
Actual Arrival Date	2019	LB	27,003,000	06-Dec-2019	21-Mar-2020	15-May-2020	02-Jun-2020	01-Apr-2020	LF
Estimated Delivery Date	2019	ZQ	38,205,000	15-Jan-2020	11-Feb-2020	27-Apr-2020	23-Jun-2020	01-Apr-2020	SCH
Actual Delivery Date	2019	ZQ	38,205,000	15-Jan-2020	11-Feb-2020	27-Apr-2020	23-Jun-2020	01-Apr-2020	SCH
External	2019	IEB	10,089,000	19-Nov-2018	14-Aug-2019	28-Sep-2019	08-Aug-2020	01-Apr-2019	STH
Updated At	2020	MEB	3,213,000	18-May-2020	10-Jul-2020	11-Aug-2020	N/A	01-Apr-2020	STH
GET2020-220	2019	AZM	0	N/A	N/A	N/A	N/A	01-Mar-2019	Trachoma
GET2020-206	2019	AZM	9,998,112	N/A	09-Jan-2019	09-Jan-2019	N/A	01-Feb-2019	Trachoma

Show 10 POs Previous 1 2 Next



Country

About

“www.ntdeliver.com/subscribers/new”

NTDeliver Country Page Subscription Form

Please fill out the form below. Once you are registered, you will receive weekly notifications when a shipment's status has changed.

First name

Last name

Organization

Email

Create Subscriber

Check the boxes next to the countries that you would like to receive shipment updates for. Select all that apply.

☐ Afghanistan

☐ American Samoa

☐ Angola

☐ Argentina

☐ Azerbaijan

☐ Bangladesh

☐ Benin

☐ Bhutan

☐ Botswana

☐ Brazil

☐ Bulgaria

☐ Burkina Faso

☐ Burundi

☐ Cambodia

☐ Cameroon

☐ Cape Verde

☐ Chad

☐ Colombia

☐ Comoros

☐ Congo

☐ Cook Islands

☐ Côte d'Ivoire

☐ DPR Korea

☐ DRC

☐ Denmark

☐ Dominican Republic

☐ Egypt

☐ El Salvador

☐ Equatorial Guinea

☐ Eritrea

☐ Ethiopia

☐ Fed States of Mic

☐ Federated States of Micronesia

☐ Fiji

☐ French Polynesia

☐ Gabon

☐ Gambia

☐ Georgia

☐ Ghana

☐ Guatemala

☐ Guinea

☐ Guinea Bissau

☐ Guyana

☐ Haiti

☐ Honduras

☐ India

☐ Indonesia

☐ Iraq

☐ Israel

☐ Jordan

☐ Kenya

☐ Kiribati

☐ Korea Rep

☐ Kyrgyzstan

☐ Laos

☐ Lebanon

☐ Lesotho

☐ Liberia

☐ Madagascar

☐ Malawi

☐ Malaysia

☐ Maldives

☐ Mali

☐ Marshall Islands

☐ Mauritania

☐ Mozambique

☐ Myanmar

☐ Namibia

☐ Nepal

☐ Nicaragua

☐ Niger

☐ Nigeria

☐ Pakistan

☐ Papua New Guinea

☐ Paraguay

☐ Peru

☐ Philippines

☐ Rwanda

☐ Samoa

☐ Sao Tome and Principe

☐ Senegal

☐ Sierra Leone

☐ Solomon Islands

☐ Somalia

☐ South Africa

☐ South Sudan

☐ Sri Lanka

☐ Sudan

☐ Swaziland

☐ Switzerland

☐ Syria

☐ Tajikistan

☐ Tanzania

☐ Thailand

☐ Timor-Leste

☐ Togo

☐ Tonga

☐ Turkey

☐ Tuvalu

☐ Uganda

☐ Uzbekistan

☐ Vanuatu

☐ Viet Nam

☐ Wallis and Futuna

☐ Yemen

☐ Zambia

☐ Zanzibar

☐ Zimbabwe

Presented by



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Live view:

www.ntdeliver.com/country

www.ntdeliver.com/subscribers/new

The Zithromax® Shipment Tracker

GET2020 DATABASE

Country Zithromax® Tracking

Please fill out the form below. Once you are registered, you will receive notifications everytime a country's shipment status changes.

First name

Last name

Email

Organization

Check the boxes next the countries that you would like to receive shipment tracking information for. Select all that apply.

☐ Afghanistan

☐ Algeria

☐ Angola

☐ Antarctica

☐ Australia

☐ Benin

☐ Bolivia

☐ Botswana

☐ Brazil

☐ Burkina Faso

☐ Burundi

☐ Cambodia

☐ Cameroon

☐ Central African Republic

☐ Chad

☐ China

☐ Colombia

☐ Congo

☐ Cote d'Ivoire

☐

☐ Democratic Republic of the Congo

☐ Djibouti

☐ Ecuador

☐ Egypt

☐ Eritrea

☐ Ethiopia

☐ Ethiopia - Afar

☐ Ethiopia - Amhara

☐ Ethiopia - BG

☐ Ethiopia - Gambela

☐ Ethiopia - Oromia

☐ Ethiopia - SNNPR

☐ Ethiopia - Somali

☐ Ethiopia - Tigray

☐ Fiji

☐ Ghana

☐ Guatemala

☐ Guinea

☐ Guinea Bissau

☐ India

☐ Iran

☐ Iraq

☐ Kenya

☐ Kiribati

☐ Laos

☐ Libya

☐ Malawi

☐ Mali

☐ Mauritania

☐ Mexico

☐ Morocco

☐ Mozambique

☐ Myanmar

☐ Namibia

☐ Nauru

☐ Nepal

☐ Niger

☐ Nigeria

☐ Oman

☐ Pakistan

☐ Papua New Guinea

☐ Peru

☐ Senegal

☐ Sierra Leone

☐ Solomon Islands

☐ Somalia

☐ South Sudan

☐ Sudan

☐ Tanzania

☐ The Gambia

☐ Timor-Leste

☐ Togo

☐ Tonga

☐ Uganda

☐ Vanuatu

☐ Venezuela

☐ Viet Nam

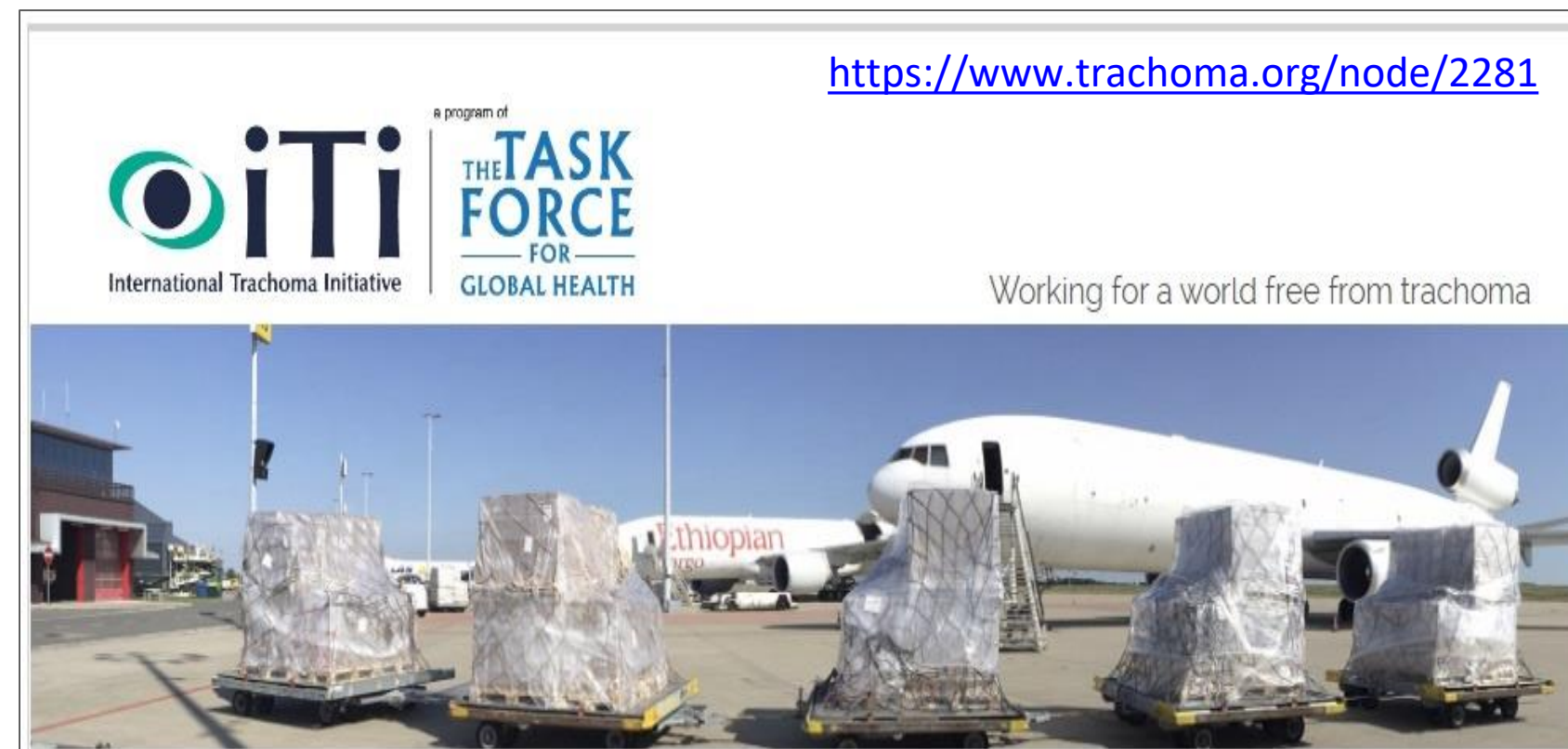
☐ Yemen

☐ Zambia

☐ Zanzibar

☐ Zimbabwe

Subscribe



The Zithromax® Shipment Tracker New Web-Based Solution Improves Visibility of the Zithromax® Supply Chain

The International Trachoma Initiative is excited to introduce the Zithromax® Shipment Tracker, a way for partners to receive updates on the status of ITI's donations to their respective countries. From the signing of the annual donation agreement to the delivery of drug at the port of destination, the Zithromax® tracker allows you to monitor the progress of a shipment from beginning to end.

The Zithromax® Shipment Tracker gives on-demand 24/7 access to information about recent and upcoming shipments of antibiotic to recipient countries in an easy-to-follow electronic format. The Tracker provides information about the quantities of drugs requested via the Zithromax® Application, current decisions made by the Trachoma Expert Committee, quantities shipped year-to-date, quantities remaining to be shipped, expected arrival date and mode of transport.

Click on the link to subscribe and begin receiving automated email updates for your countries of interest:
<https://www.trachomadata.org/supply-chain/subscription>

GET2020 DATABASE

Zithromax® Shipment Tracker - Nigeria

Powered by GET2020 Database

2020

Print Options -

2020 TEC Decision - Current

Approved MDA	4,802,119
Approved - Surgery/Research	No Approved Surgeries/Research

Contingent Approvals

Reserve 1: Funding and/or partner not confirmed	No Reserve 1
Reserve 2: Awaiting impact survey results	No Reserve 2
Reserve Special: Special Concerns	No Reserve Special
Does Not Meet Criteria	1,349,418

2020 Shipment Summary

2019 Carry Over	0
2020 Total Planned Shipment	790,416
Shipped Year to Date	0
Remaining to be Shipped	790,416

Shipment Information

Shipment	Planned Shipment Month	Planned MDA Month	POS (Bottles)	TABS (Bottles)	# of Treatments	Shipment Date	Arrival Date	Mode
Nigeria	September	August	263,472	0	790,416			Air

Shipment Tracking

Legend: Completed Cancelled Outstanding Issues Not Completed

Shipment	MOU Signed	Inventory Report Submitted	Green Light Issued	Order Submitted	Order Packed	Order Shipped	Shipment Arrived	Confirmation of Receipt
Nigeria	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>

[Example Nigeria](#)



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The Zithromax[®] Shipment Tracker

Live view:

<https://www.trachomadata.org/supply-chain/subscription>



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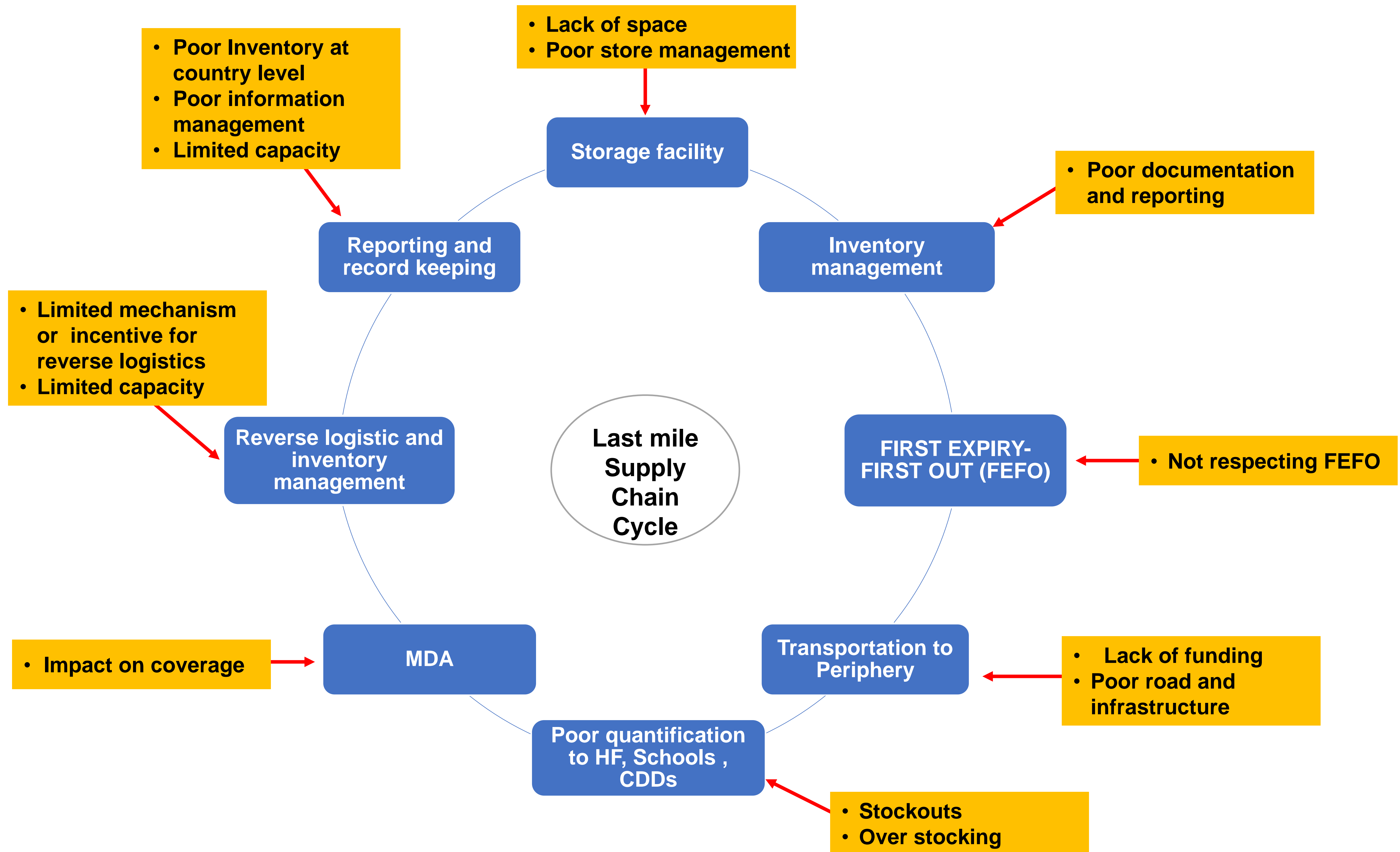


Overview of the Last-Mile Supply Chain



Challenges of Last mile

Challenges



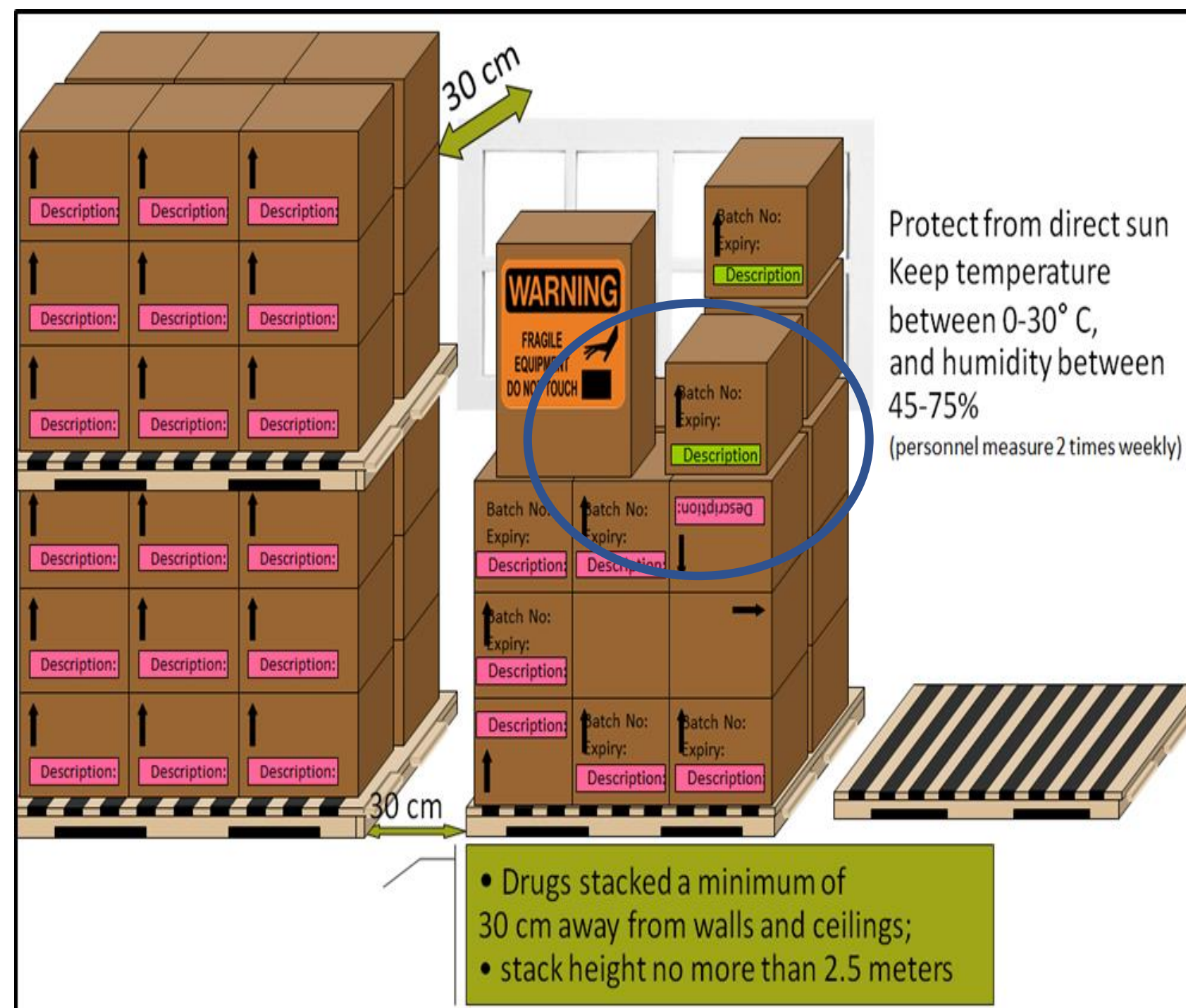
Receipt of Medicines at Central Medical Store



- Medicines are inspected and counted
- Proof of delivery is signed
- NTD medicines are securely stored before transfer to MDAs

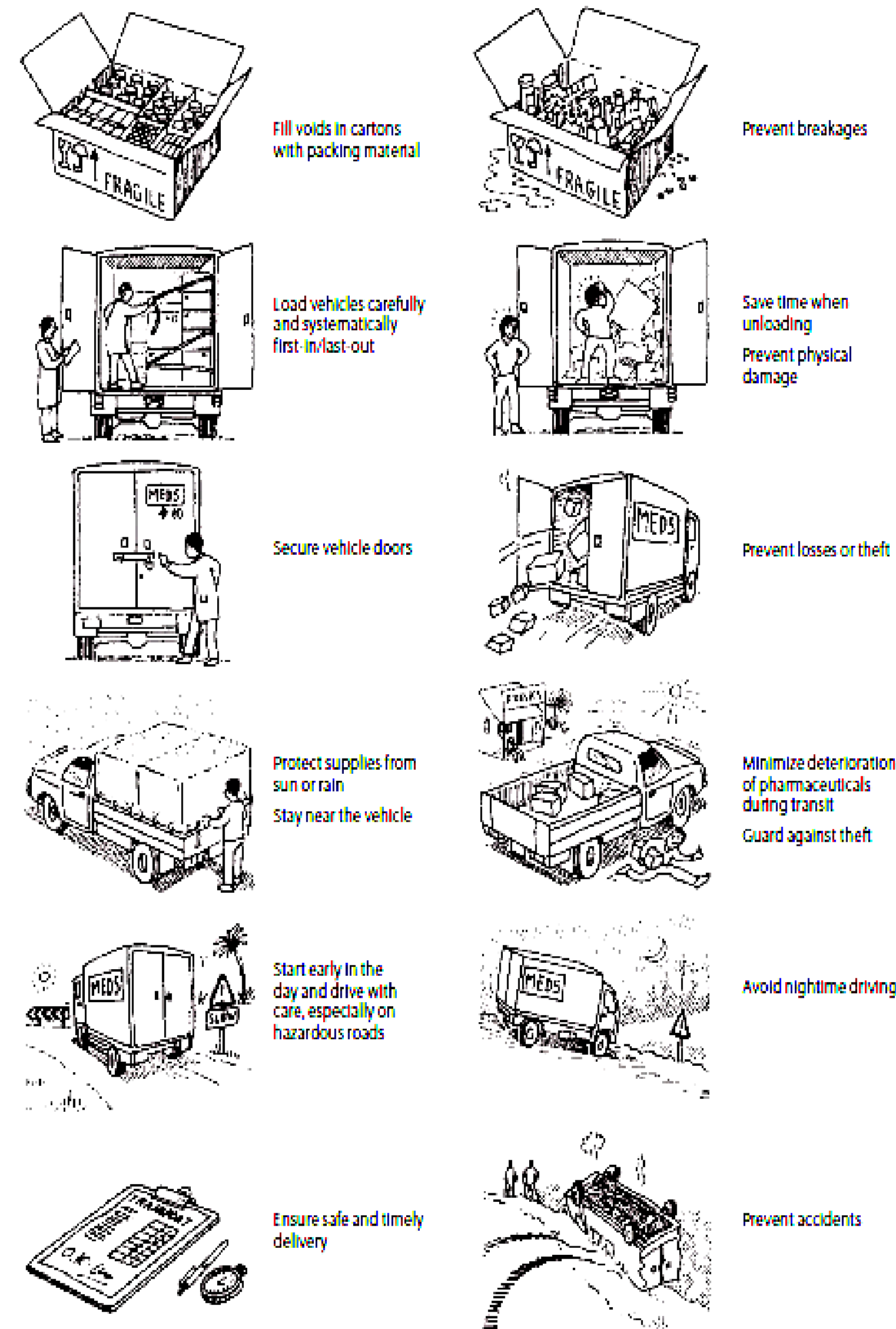
Practice First Expiry – First Out (FEFO)

- Key Considerations of using FEFO



- Assurance of product quality
- Reduction of loss due to expiry
- Stewardship of donated drugs

Inventory Management



- Tracking of drugs at every stage before/after the MDA
 - Knowledge of where the drugs are at every stage, how they're stored and transported
 - Visual inspections; not relying only on reports
 - Recording of damaged, expired stocks, and the reasons
 - Accurate reporting and ensuring management of drug data

Reverse Logistics



- Key Factors:
 - Return usable surplus stock from lower levels to higher levels to facilitate redistribution.
 - Ensure adequate budget is available.
 - Responsible persons clearly identified to intact reverse logistics.

Reporting



- Key Factors:
 - Report both treatment figures and stock balance side by side
 - Do not focus only on treatment number.
 - Determine the timeline of reporting after MDA
 - Ensure records are kept at all level and summary forwarded
 - Utilize the data locally
 - Responsible persons clearly identified to intact reverse logistics.

Quantification



- Defines how much will be procured and when will it be delivered
 - Estimates demand, unit costs, existing stocks, expiries, freight, logistics, lead times and buffer stocks

Annual Forecasting

- Forecasting defines how much drug is needed to meet the health demand of the population.

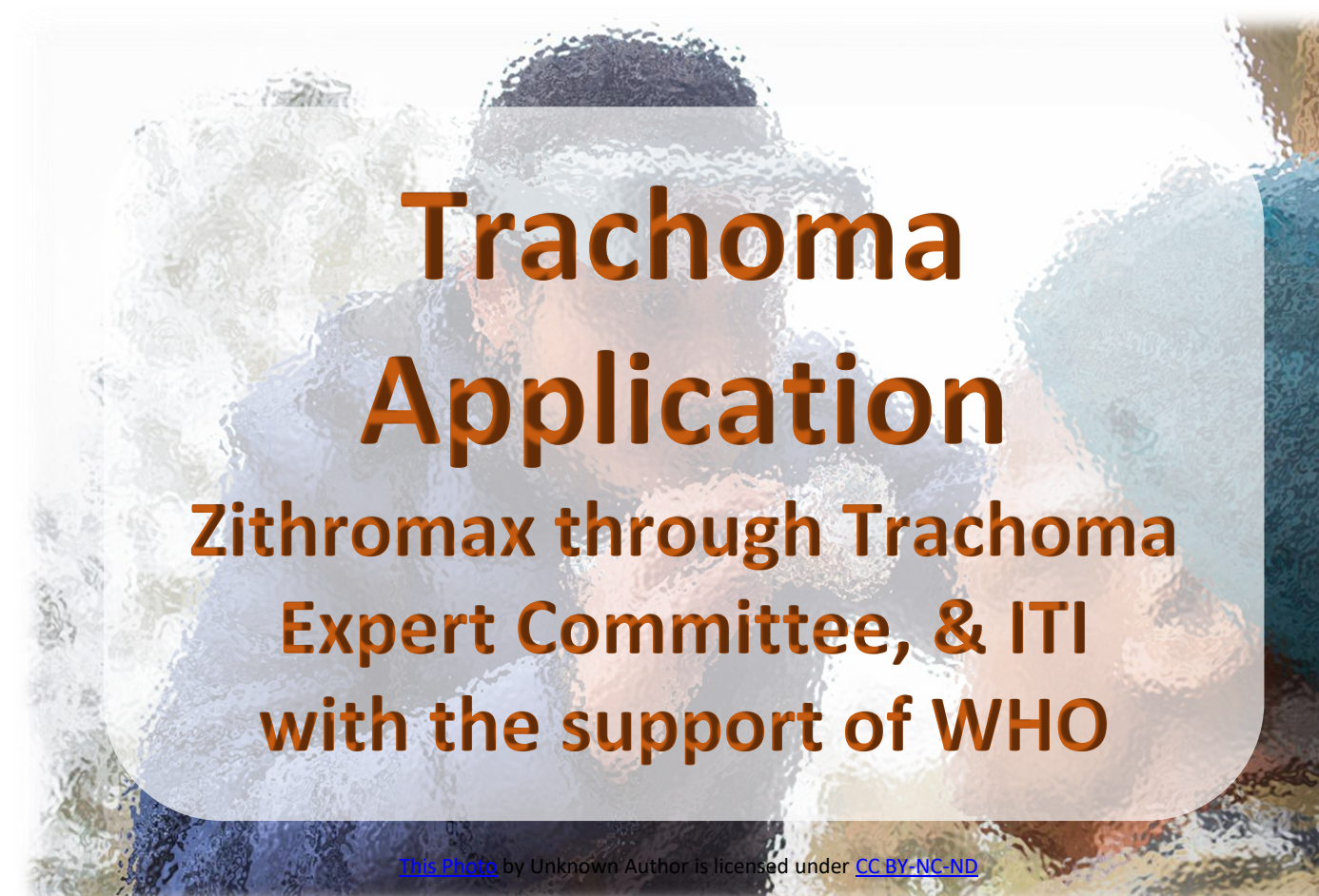
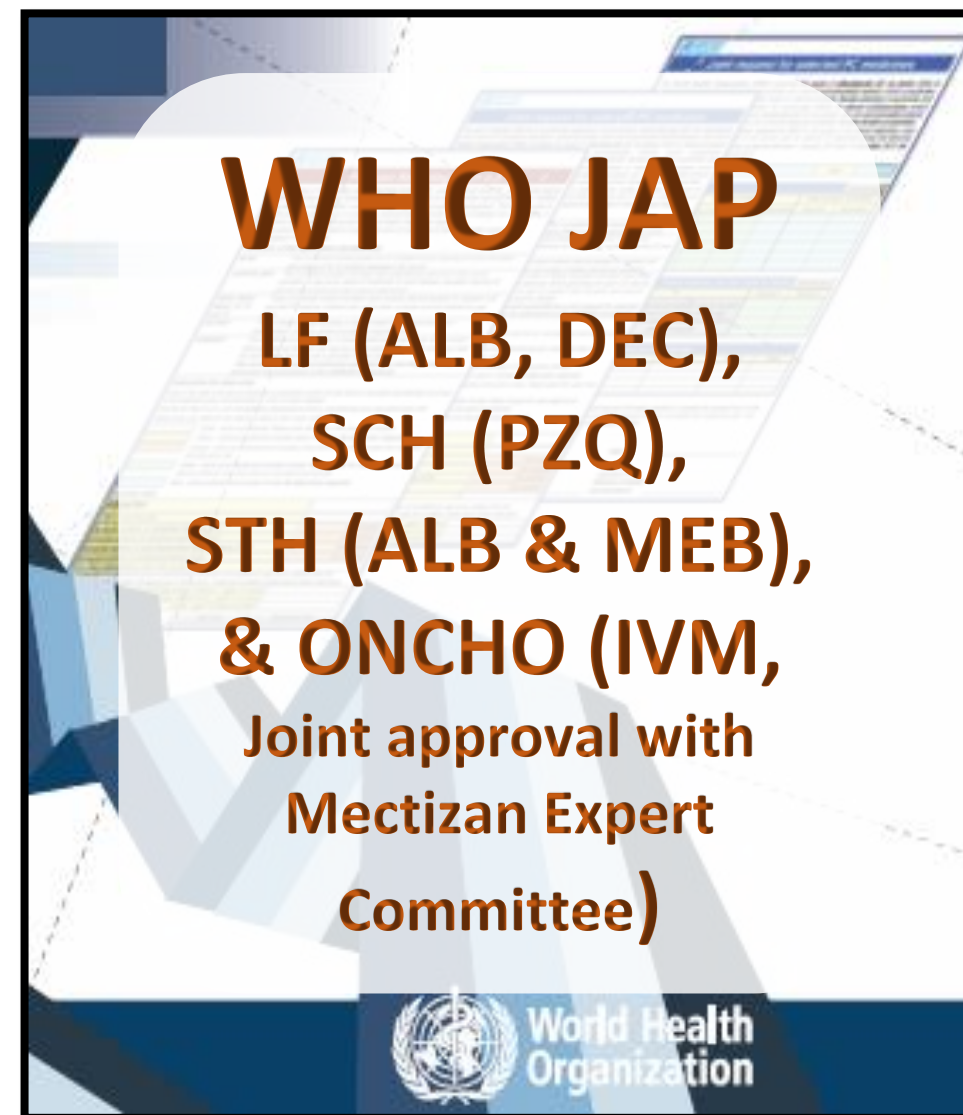
Calculate using:

- Historical treatment data
- Edemicity changes
- Demographic data



Application Submission and Approval

- Key Factors for Supply Chain:
 - In-country Inventory
 - Shipping Contact information
 - Import requirements
 - What is required, and how long does this process take



Tools for Last mile

STOCK MANAGEMENT TOOL

Country: **Angola** Language: **English**

Programme: **National NTD Program** Year: **2020**

Level/Location: **National level** Name of store: **Central Medical Store**

Version septembre 2018

Navigation: Cover | Guide_Fr | Guide_En | Entrée | Sortie | Stock_Lot | Bon | Monitor | Tbl_Bord | Stocks | ...

SOPs for Supply Chain Management Toolkit (available in French, English, and Portuguese)

- | | |
|---|--|
| 01. Joint Application Package (JAP) | 07. First Expiry, First Out |
| 02. Shipping Notification and Green Light | 08. Reverse Logistics |
| 03. Customs Clearance and Delivery | 09. Removing Expired and Unserviceable Drugs |
| 04. Transport | 10. Waste Management |
| 05. Inventory Management | 11. Forecast-Quantification |
| 06. Storage | |



NTD
Supply Chain

Breakout Sessions on Supply Chain



Breakout Session One: First-Mile

10 min - Question and Answer Session

10 min – Discussion on Best Practices
and Strategies

Breakout Session Two: Last-Mile

10 min - Question and Answer Session

10 min – Discussion on Best Practices
and Strategies

Key Points of First Mile and Last Mile Breakouts

5 min – First Mile Reporter

5 min – Last Mile Reporter





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