Logistics of Reducing Impact of Communicable Diseases

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Task Force for Global Health – International Trachoma Initiative
The International Trachoma Initiative

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International Trachoma Initiative Background

• The International Trachoma Initiative (ITI) was founded in 1998 in response to the World Health Organization’s (WHO) call to eliminate blinding trachoma by 2020 (GET2020).

• Founding partners: Pfizer and the Edna McConnell Clark Foundation

• 2009 ITI merged with the Task Force for Global Health

• Focus on managing Zithromax® drug donation and advocating for partners to eliminate blinding trachoma
Trachoma is the world’s leading cause of preventable blindness

**Trachoma is a disease of poverty:**
- Trachoma is caused by a bacteria called *Chlamydia trachomatis*
- Infected the inner side of the upper eyelid
- Endemic in 57 developing nations
- 3.1 million visually impaired

**Trachoma is a disease of mothers and children:**
- Prevalence of infection highest in children 1 to 5 yrs old
- Women blinded up to 3 times more than men
The SAFE Strategy

To combat trachoma, the World Health Organization has endorsed the SAFE Strategy.

– **S** is for surgery for people at immediate risk of blindness

– **A** is for antibiotics to treat and prevent trachoma

– **F** is for facial cleanliness and improved hygiene

– **E** is for environmental improvements, especially access to clean water and latrines.
ITI Supply Chain Summary

ITI Supply Chain At A Glance

- ITI is supporting 23 countries
- ITI is shipping Zithromax to 19 countries
- In 2010 over 53 million Zithromax treatments were shipped.
- In 2011 we are preparing to ship nearly 65 million Zithromax treatments
- Our plan is to expand to an additional 12 countries by 2015
- 80% of the treatments shipped in 2010 were concentrated in 4 countries
  - Ethiopia
  - Mali
  - Niger
  - Burkina Faso

Treatments Shipped from 1999 to 2009

[Graph showing the increase in treatments shipped from 1999 to 2009]
In-Country Supply Chain Challenges

• Duty free customs clearance
• Management of drug expiry
• Inadequate storage conditions
• Reporting of treatments distributed and remaining inventory
Duty Free Customs Clearance

Challenge:
- Some countries do not allow duty free clearance of donated drugs
- MoH must budget funds and make arrangements with the MoF to ensure that funds are on hand for in bound shipments

Learnings:
- Gather details on the customs clearance process for each country prior to shipping goods. This will allow you to avoid delays and demurrage charges.
- ITI conducts a supply chain audit for each new country. This is conducted by a third party consultant. Issues are raised and then followed up for resolution
- Make arrangements with WHO or other entities that have duty free status to assist in clearance of the drug
Management of Drug Expiry

Challenge:
- Expiration of drugs due to lack of proactive management by First-Expiry-First-Out (FEFO)

Learnings:
- Hold the country responsible for drug expiry
- Educate responsible parties on proper storage conditions which will help promote FEFO
Inadequate Storage Conditions

Challenge:

- Inadequate storage conditions most often observed at the district level. High Temperatures are the most common offense (> 30 degrees Celsius)

Learnings:

- Limit the amount of time drug is sent to district prior to distribution
- Return drugs to central stores after distribution if possible
- Locate a cool and dry area to store remaining drugs if they must remain in the district

We have observed drug stored in sea containers in sub equatorial areas. This container would consistently exceed the optimum store temperature.

This container does not provide The optimum storage conditions In most environments
Reporting of Inventory

Challenge:
- Accurate accounting of all remaining drug inventory in country at the central warehouse and district levels.

Learnings:
- Integrate accountability for drug inventory into the annual application process
- Review the number of treatments shipped vs. the number of treatments distributed and ask for a report on what remains
- Ensure that inventory reporting includes the remaining product at the district level
- Do not ship more product than necessary. Reduce the following year shipment by what remains in inventory.
Conclusion

• Challenges for In-Country supply chain performance will always arise
• Be prepared to address challenges with creative solutions
• Research what others have done in the past to deal with similar issues
• Keep moving forward and remain optimistic
Zithromax® Recipient Countries in 2011

- Burkina Faso
- Burundi
- Cameroon
- Eritrea
- Ethiopia
- Guinea-Bissau
- Kenya
- Malawi
- Mali
- Mauritania
- Nepal
- Niger
- Nigeria
- Senegal
- Sudan
- Southern Sudan
- Tanzania
- Uganda
- Zambia