



Module 10

Inventory: Managing Stocks at the HIV Testing Site

Purpose	To equip the participants with necessary knowledge so they can properly manage the stocks at the rapid testing sites.
Pre-requisite Modules	Module 5: Assuring the Quality of HIV Rapid Testing
Learning Objectives	<p>At the end of this module, you will be able to:</p> <ul style="list-style-type: none">• Maintain proper records• Maintain proper level of consumables• Use first-expiry-first-out concept when managing stocks• Inspect delivery of supplies before acceptance• Identify lot numbers and expiry dates• Keep kits and supplies in proper storage
Content Outline	<p>What is stock management?</p> <p>Record keeping</p> <p>Re-order levels</p> <p>Receipt of consumables</p> <p>Storage of consumables</p>
Handouts	<p>Sample Stock Card</p> <p>Sample Stock Book</p>
 Notes on Customization	Provide specific procedures on how to order supplies. Include specific forms and registers such as stock card and stock book that are used in your country. If an in-country maximum lead time has been established, replace the number (12 weeks) with the in-country time.

Stock Management Means...

Stock Management means properly maintaining adequate supplies to ensure uninterrupted service

Stock at a Rapid Test Site Includes...

Stock at a rapid test site includes those supplies stored in the site's stockroom and those supplies at your workstation.

Stock Management Leads to High Quality Testing

Stock management at a rapid testing site ensures availability of materials and kits when needed, avoids the use of expired kits, and minimizes wastage.

The provision of a smooth and continuous rapid HIV testing service to clients at PMTCT and VCT sites largely depends on the availability of the kits and other consumables at all times. Not having the necessary kits and supplies leads to a potential loss of service to client if no kits are available at site.

Sufficient kits and supplies must be ordered and present at the site well in advance before a new site starts testing. It is important not to over-stock or under-stock supplies at a rapid testing site.

Under-stocking has several negative effects. When testing clients, all supplies need to be on hand immediately. Poor planning in the ordering system will result in insufficient supplies mid-flow of testing clients. This in turn will result in an interruption of testing. The entire testing system at the site could be seriously compromised until further supplies are present at the site. Sites that are severely lacking in supplies could result in closure of that site until supplies arrive.

Over-stocking also has negative effects. Properly managing your stocks will ensure only adequate supplies are on hand. Overstocking can lead to waste and potential for kits expiring before use, leading to compromised test results. **NEVER USE EXPIRED KITS!**

How Do You Manage Stock?

To illustrate the principles of stock management, review the scenario below.

You own a sundry shop. You buy the merchandise from suppliers and sell them for a profit. To keep a profitable business, you must always have the right items available for customer purchase everyday. As a store owner, what must you do to maintain adequate stocks?



Stock Management Involves Knowing...

You must know:

- What and how much stock they have
- When they need to replenish their stocks
- The amount of merchandise to order
- When, what, and how much stock has been ordered
- Where everything is stored
- When and how much fresh stock has been received, and by whom

Just as you must know how to manage stock in a sundry shop (as seen above), you must know how to manage stock at the HIV rapid testing site. Proper stock management means that a site supervisor will always know:

- What stocks and how much is present at the site at any given time
- When to order fresh supplies – and know approximately how long it takes to deliver
- How much has been ordered and when was it ordered.
- When fresh supplies were received at the site – who received the supplies, what date and how much.
- Where all individual supplies are stored

To know everything mentioned above, you must have a stock management plan.

Stock Management Involves...

Stock management involves performing regular stock counts, maintaining proper inventory records, determining when to re-order, re-ordering proper amount of supplies, placing orders promptly, inspecting and logging in new stock when received, and ensuring proper storage of inventory

Continue reading through this module to learn more about the activities involved with managing your stock.

Perform a “Stock Count”

In order to know exactly what and how much stock you have, the best way is to perform a stock count. A stock count is the physical counting each item in the stock. This stock count should be performed at the beginning of each month. You or a designated person is responsible for performing this count. It is important that all items must be accounted for. Everything that comes in and goes out must be recorded.

Maintain Proper Inventory Records

An efficient stock management depends upon accurate record keeping. Keeping records will save you time – you should know the quantity in stock without counting. Proper inventory records allow easy handover of the “store” to your colleague if you are not at work. They also allow you to observe the pattern of consumption

Keeping records will protect you. You are protected against accusations of theft. You can also keep track of deliveries when they arrive, in case of disputes. Keeping records also prevents over-stocking and under-stocking. This allows for estimation of supplies for a year for budgeting purposes.

There are two types of records: stock card and stock book. Each item in stock must be recorded on a stock card. This card can simply be a heavyweight index card. For ease of use and access, the cards should be stored in alphabetical order according to the item name.

The stock book contains a listing of all items in the “store”. It must be routinely updated when orders are placed and received. It also serves as a source of reference to track orders that have been placed and not received. The information recorded in the stock book may help a site adjust the lead times based on history of deliveries. Using an accurate lead time will better ensure that a site has on hand the materials needed to conduct HIV rapid testing.

Stock Card: An Example

An example stock card is provided for your reference at the end of this module. Each item used in the laboratory should be recorded on a stock card. You should record the following information:

- **Item Name** – Record the name of the kit, e.g., “Determine”
- **Unit** – Record the number per box or container, e.g., 100 tests per kit
- **Minimum Stock** - Record the amount of stock calculated based on the usage rates (to be explained later)
- **Received from and issued to** – Record where the stock is received from or issued to. *This is country specific*
- **Balance** – must be recorded each time a stock item is received or issued.

A physical stock count should be performed monthly, with this total indicated on the form. Any discrepancies should be noted and investigated.

Stock Book: An Example

A sample page from a stock book is provided for your reference at the end of this module.

Reconciling Stock with Records

It is important to establish an accounting system that tracks items that come in, items that are used, and items that are remaining in the stock. Ideally, the number of a certain item remaining in the stock should equal the number of the item that came in minus the number used. But in reality, there is usually a discrepancy due to loss.

Determine When to Re-order

Re-order when stock reaches minimum level. It is also important for you to understand terms that are used in stock management.

Minimum stock is the amount of stock required to support testing operations until additional supplies are received.

Lead time is the time between placing an order and receiving it.

Maximum usage is the number of test kits used in a given time period

Calculating Minimum Stock Level

$$\text{Minimum Stock Level} = \text{Maximum lead time in weeks} \times \text{Maximum Usage}$$

Example:

Maximum lead time = 12 weeks

Maximum usage/wk = 3 kits

Minimum stock level = 12 x 3 = 36 kits

When only 36 kits are left, place an order.

Exercise: Calculating Minimum Stock Level

On average, you use 5 Uni-Gold kits a week.

It normally takes 12 weeks to receive the order you placed.

You should order more Uni-Gold kits when you have ____ kits left in the inventory.

(Answer: 60)

Determine How Much to Re-order

To determine how much to re-order, you must establish the proper full stock level. Re-order to reach that level. When establishing the quantity of full stock, you should:

- Consider stock consumed, borrowed, expired, wasted, pilferage
- Never order more than your storage space can hold
- Never order more supplies than you can use before they are expired
- Consider maximum usage plus minimum stock level

Determine Full Stock Level

You must maintain stocks that cover maximum usage plus minimum stock level. For example:

Maximum usage /wk = 70 tests

tests / month = 70 x 4 = 280 tests used per month

Assuming 20 tests per kit, how many kits are used per month?

$280 / 20 = \underline{14}$

Lead time = 12 weeks or 3 months

Minimum stock level = 14 kits x 3 months = 42 kits

Full stock level = 42+14 = 56

You must always have 56 kits in stock at the beginning of each re-order cycle.

**Exercise:
Determine Full Stock Level**

Based on the information below, calculate:

- The minimum stock level
- The number of test kits you should have in the beginning of each re-order cycle

Maximum usage /wk = 80 tests

How many tests are used per month? _____ tests/month

Assuming 15 tests per kit, how many kits are used per month?

_____ kits/month

Lead time = 12 weeks or 3 months

Minimum stock level = _____ kits

Full stock level = _____ kits

You must always have _____ kits in stock at the beginning of each re-order cycle (3 months).



Place Orders Properly

To ensure proper delivery of supplies and kits, you must place orders properly. You will need to follow specific instructions on how to complete forms used in your country.

Make sure you understand what the contingency plan is when stock is not available. This includes both a national contingency plan and a site contingency plan.

You will also need to understand the communications or feedback systems to the central level on: how to cease standing deliveries, why should you cease orders, what information should be fed back to central procurement or stores, e.g., updated consumption rates during scale up.

Inspect Delivery of New Orders

Upon receipt of deliveries to your test site, you will need to check to ensure what has been ordered was delivered. For example, if 100 Uni-Gold kits have been ordered, check to make sure 100 kits have been delivered.

You will need to inspect the condition of supplies. Make sure that supplies received are in good order. Never accept kits that are either short-dated or that have already expired. Short-dated means items that will expire before they can be used.

Not only do you date each item when received, but date each item, particularly the buffers, when opened or put to use. Store new shipment behind existing shipment. This will ensure stock that will expire the soonest is used first. Lastly, be sure to either create or update your stock management records.

Find out the specific in-country information in response to the following situations and write the answers in the space provided.

What do you do if your order doesn't arrive?

What do you do if you receive a partial order?

What do you do if a box has been opened or is damaged?

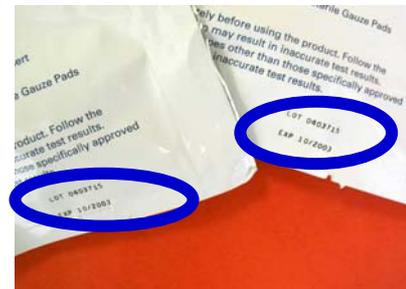
What paperwork must be completed to report discrepancies in what you ordered and what you received?

What do you do if central stores are out of stock?

Examine Lot Number & Expiry Date

It is important to note the expiry dates of the kits received. Properly managing your stocks will prevent storage of kits that will be outdated before they can be used.

DO NOT mix lot numbers. Keep devices and corresponding buffers together.



Ensure Proper Storage of Inventory

Kits and supplies should be kept in locked storeroom or cupboard. Theft of kits is common, and following strict inventory procedures will immediately identify problem areas.

Store according to manufacturer's instructions. Adhere to the storage temps required by the manufacturer. Some kits can be stored at room temperature, while others require refrigerated temps of 2-8 degrees centigrade.

All stock should be placed in well ventilated clean and tidy room. Store away from direct sunlight. Place items on shelves – Where possible, items should be stored in an orderly fashion on shelves, keeping like items together.

Always place new shipments of supplies and kits behind existing ones. This will re-enforce the principle of first in, first out. Remember "First Expiry, First Out".



Key message

- Maintain an adequate inventory at all times to ensure uninterrupted service.
- Don't let any item run out before re-order.
- Never order more than your storage space can hold. Never order more supplies than you can use before they are expired.
- All items in the inventory must be accounted for and recorded.
- Always inspect new shipment before accepting.



Module Review

Find out how much you have learned by answering these questions.

What does inventory management mean?

What information is recorded in inventory record-keeping?

How do you determine minimum stock level?

How do you determine proper full inventory level?



Module Review

Find out how much you have learned by answering these questions.

What does “First Expiry First Out” mean?

What procedure should you follow when receiving new kits and supplies?

How should kits and supplies be stored?
