

Division of Strategic National Stockpile

RSS Management Training Controlling Inventory Apportionment



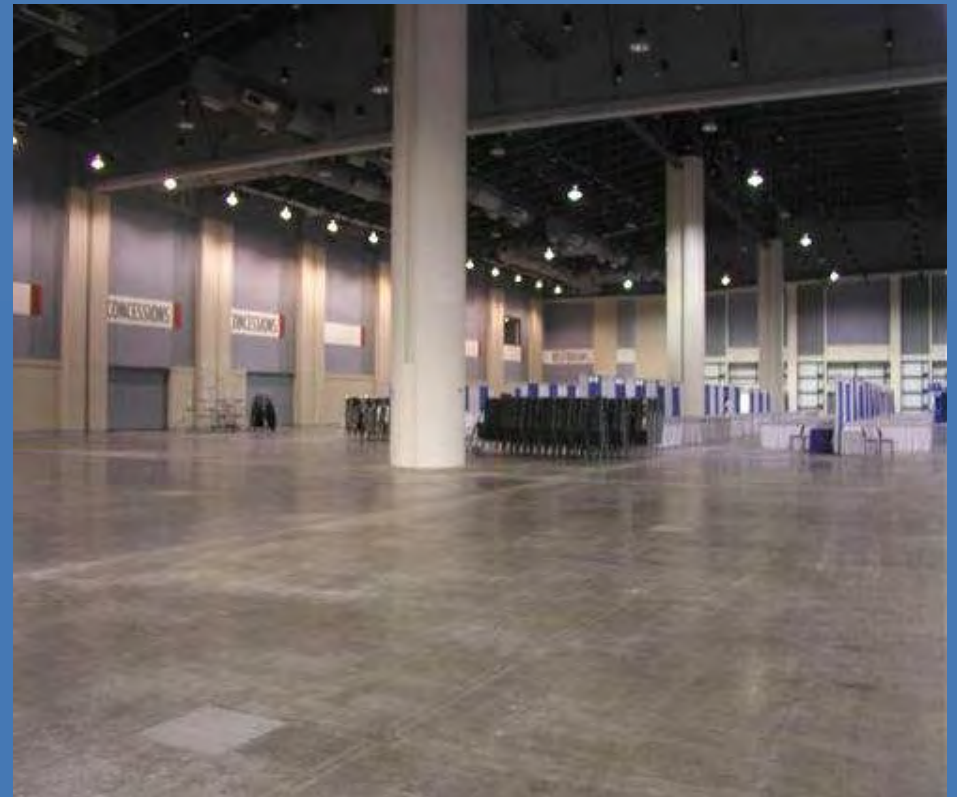
PURPOSE

To familiarize the student with the requirements for a Receive Stage, and Store (RSS) warehouse as well as the planning considerations and resources needed to run it.



REQUIREMENTS

Minimum 12,000 square feet, 130 containers with a base of 43" x 61" must be arranged with the 61" side being accessible facing a 6 - 8' aisle.





← **Hard surface, no carpet**

Safe sound secure facility →



← **Ensure the facility is clean and free of infestation. Any facility use to store Hazardous products should not be used.**



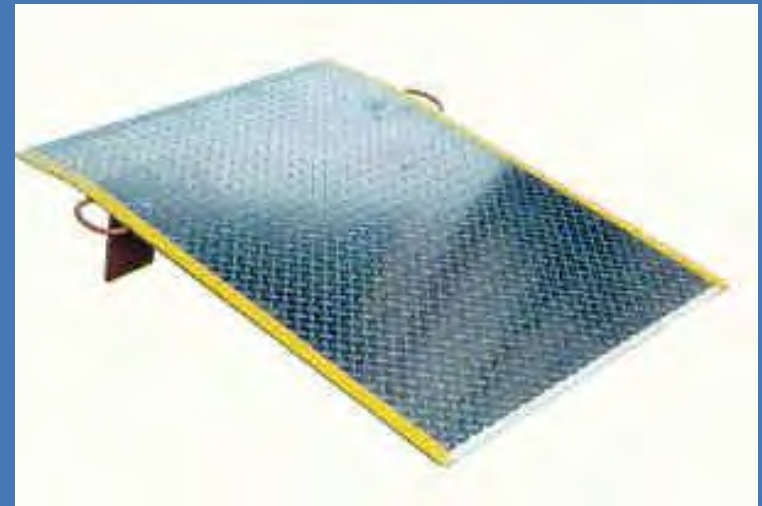
Loading Docks



Dock doors



Dock Levelers / Dock Plate



What's wrong with this dock?



There are two major things wrong



- There is no place for a tractor trailer to maneuver.



- Safety, this dock is not stable enough.



If No Loading Docks Available

- Portable Ramp
- Forklifts
 - (access to outside load area)
- Personnel



Material handling equipment (MHE).



Minimum of
2 forklifts
4 – 6 K



Minimum of
4 pallet jacks
and access
to pallets



Backup Power Supply (Generators)



What systems are on generator backup?



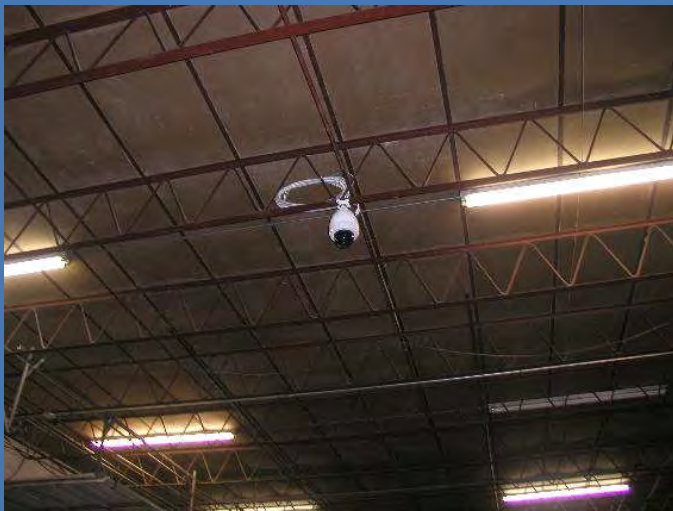
Lighting

- Lighting needs to address a couple of areas;
 - Day time
 - Inside lights, are they connected to the generator?
 - Night time
 - Outside light to support 24 hour operations.



Security

- Talk to the USMS
- Basics
 - Restricted access
 - Lockable doors and windows

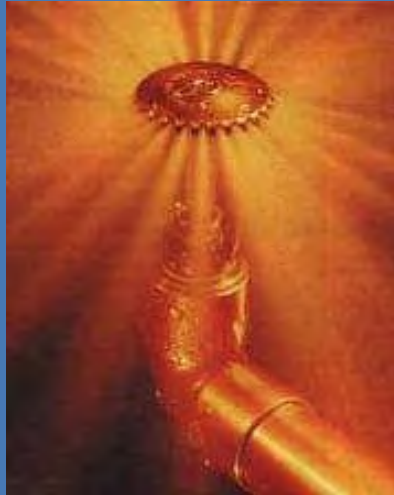


Climate Control – The storage site must be able to maintain a temperature range from 58-86 degrees F.

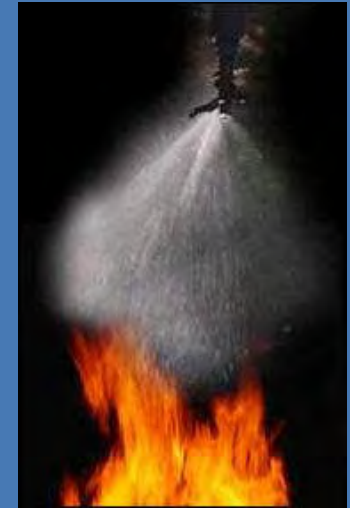
- **The Warehouse must be able to maintain a temperature between 58 – 86 degrees**
- **Climate control needs generator backup**



Sprinkler System and Fire Extinguishers



The RSS must have a
sprinkler system



Ensure the RSS has
Fire Extinguishers



Break room, Snack Machines, Bathrooms, Drinking Water



DESIGNATED
SMOKING
AREA



Office space with 6 desks, chairs, and power outlets.



At least 3 phone lines with phones.



← 1 Phone line for the land line

1 Phone line for the Fax →



← 1 Phone line for data transfer



RSS Warehouse Personnel Requirements

• RSS/Warehouse Manager	1
• Inventory Control - Lead + 2 per shift.	3
• Storage/Picking - Lead + 4 teams of 2 per shift.	9
• Quality Control - Lead + 1 per shift	2
• Shipping/Receiving - Lead + 2 per shift.	3
• Shift leads -1 per shift.	1
• <u>Addition Personnel - 2 per shift</u>	<u>2</u>
	21

Sources of Personnel

RSS / Warehouse Manager (Medical)
Teams – Personnel from a Warehouse

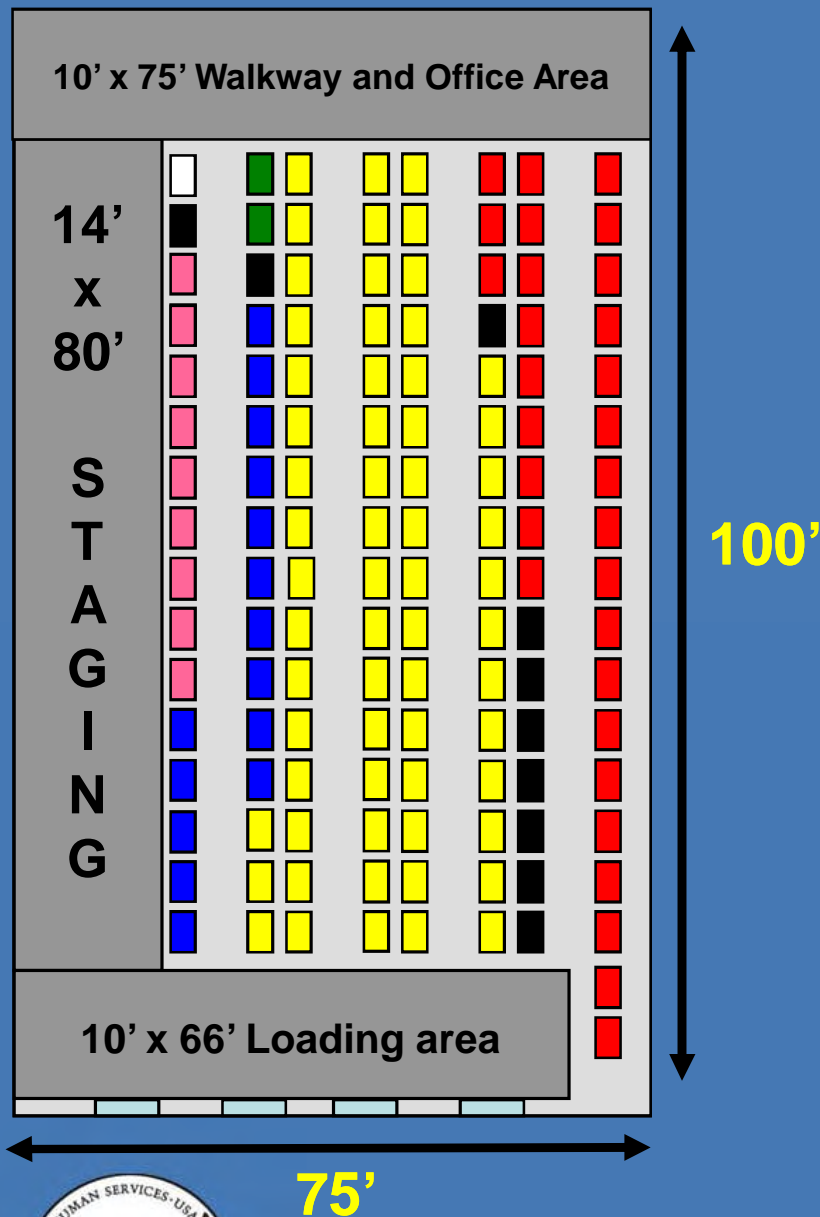


Warehouse Set-up

- All containers must have their open side (5') facing an aisle.
- They should be arranged in container number sequence, this will also group the containers into their color codes.
- Aisles must allow enough space to load and move pallets (48" x 42").
- Dock area must be left clear for loading/unloading.
- A staging area must be set up to preposition product for pick up.



Example warehouse layout.



- This layout has 130 containers.
- Each container is 4'x5" aisles are 6'.
- There are 7 rows of 16 containers and 1 of 18.
- This takes up about 4520 sf.
- The staging area is 1120 sf.
- The loading area is 660 sf.
- The walkway/office is 750 sf.





CENTERS FOR DISEASE CONTROL & PREVENTION



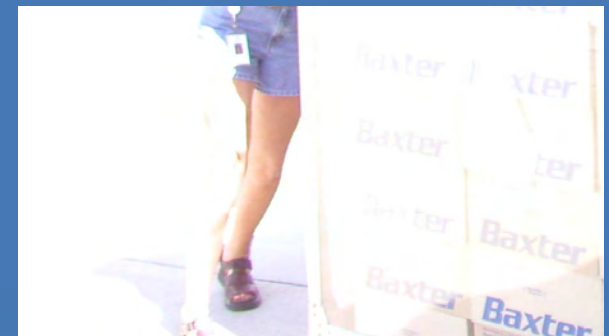
Material Flow

- At each RSS site visualize how the material will flow
 - Receiving to Storage to Issuing to Shipping
 - Inspect the path for holes, rocks or door jams anything that could be an obstructions
 - If the obstruction is permanent can it be bridged?



Safety

- Safety Equipment
 - Boots, Hearing etc...
- Heavy machine in use pay attention



Issuing Supplies

- There are 3 ways the state's authorized representative can sign for the PPG
 - 1. Sign for the total PPG
 - 2. Sign for containers
 - 3. Sign for individual items
 - Logistics will oversee all issues of SNS assets and track quantity, lot numbers and expiration dates
- Anything the state official signs for becomes their responsibility and may distribute as they want.
We become **advisors** at this point.



Controlling Inventory



Receiving the Push Package



Ensure that all the containers of the Push Package are received. All other SNS assets will also need to be verified upon receipt.



Receiving the Push Package

- 8 trucks, or more, will be coming.
- The PPG should be offloaded one or two trailers at a time to stay organized.
- Write down the container numbers as they are offloaded.
- Have someone directing the set up of the containers.



Receiving the Push Package



- Inspect containers for damage and intact seals.
 - If the container is damaged also inspect the product in the container.
- Identify priority containers needed for immediate distribution.



Receiving the Push Package

- Sort by color and then by number, as time permits.
- Ensure all container doors are facing the aisle.
- Do not open containers until the product is required.
- Report to the warehouse manager when everything is setup and ready to issue.



Electronic File

- The TARU logistics lead will provide an inventory of the PPG on a floppy disk.
- This will be formatted as a pipe-delimited file.
- It can be uploaded into an inventory management database or be run off excel.
- This will start the site off, but receipts and issues must be applied to it.



Electronic file

Conta Seal	Locator	NDC/Item #	Description	Qty	UOM	Unit Pack	Lot	Expiration	Type
1	5879 ILP1.C.00.00.0.00001.A	66336-031-20(100)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (100/cs)	25	CS	100	N10277	30-Nov-04	BIO
1	5879 ILP1.C.00.00.0.00001.A	66336-031-20(100)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (100/cs)	18	CS	100	N10283	31-Oct-04	BIO
1	5879 ILP1.C.00.00.0.00001.A	66336-031-20(400)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (400/cs)	21	CS	400	N10688	30-Jun-04	BIO
2	5878 ILP1.C.00.00.0.00002.A	66336-031-20(100)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (100/cs)	43	CS	100	N10283	31-Oct-04	BIO
2	5878 ILP1.C.00.00.0.00002.A	66336-031-20(400)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (400/cs)	21	CS	400	N10688	30-Jun-04	BIO
3	5871 ILP1.C.00.00.0.00003.A	66336-031-20(100)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (100/cs)	43	CS	100	N10277	30-Nov-04	BIO
3	5871 ILP1.C.00.00.0.00003.A	66336-031-20(400)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (400/cs)	21	CS	400	N10688	30-Jun-04	BIO
4	5509 ILP1.C.00.00.0.00004.A	66336-031-20(100)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (100/cs)	43	CS	100	N10277	30-Nov-04	BIO
4	5509 ILP1.C.00.00.0.00004.A	66336-031-20(400)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (400/cs)	3	CS	400	N10819	30-Jun-04	BIO
4	5509 ILP1.C.00.00.0.00004.A	66336-031-20(400)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (400/cs)	18	CS	400	N10850	30-Jun-04	BIO
5	5877 ILP1.C.00.00.0.00005.A	66336-031-20(100)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (100/cs)	43	CS	100	N10283	31-Oct-04	BIO
5	5877 ILP1.C.00.00.0.00005.A	66336-031-20(400)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (400/cs)	2	CS	400	N10688	30-Jun-04	BIO
5	5877 ILP1.C.00.00.0.00005.A	66336-031-20(400)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (400/cs)	19	CS	400	N10850	30-Jun-04	BIO
6	5873 ILP1.C.00.00.0.00006.A	66336-031-20(100)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (100/cs)	7	CS	100	N10093	30-Jun-04	BIO
6	5873 ILP1.C.00.00.0.00006.A	66336-031-20(100)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (100/cs)	36	CS	100	N10277	30-Nov-04	BIO
6	5873 ILP1.C.00.00.0.00006.A	66336-031-20(400)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (400/cs)	21	CS	400	N10819	30-Jun-04	BIO
7	5872 ILP1.C.00.00.0.00007.A	66336-031-20(100)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (100/cs)	43	CS	100	N10283	31-Oct-04	BIO
7	5872 ILP1.C.00.00.0.00007.A	66336-031-20(400)	Ciprofloxacin 500mg oral tablet #20 tab unit of use bottle (400/cs)	21	CS	400	N10850	30-Jun-04	BIO
8	5106 ILP1.C.00.00.0.00008.A	66336-449-20(100)	Doxycycline 100mg oral tablet #20 tab unit of use (100/cs)	43	CS	100	M10535	30-Jun-04	BIO
8	5106 ILP1.C.00.00.0.00008.A	66336-449-20(400)	Doxycycline 100mg oral tablet #20 tab unit of use (400/cs)	21	CS	400	M10483	28-Feb-04	BIO
8	5106 ILP1.C.00.00.0.00008.A	CNT-36386-505	Container "B" Short	1	EA	1/EA	1117		CONTA



Issuing from the PPG

- Get the number of patients that each dispensing site plans to support.
- What products are needed?
- Is there enough stock to support a full issue to each site?
 - If so, prepare pick sheets, palletize the product, wrap the pallets, label the pallets, load on the delivery trucks, and record the issues.



Pick Sheet

Delivery point: _____

Container	Item #	Description	Qty	Lot #	Expiration

Received by: _____

Date: _____



What are your priorities of shipment?

- Critical needs
- Distance/time to dispensing sites.
- Number of delivery vehicles.
- Other???



Picking Product

- Once you have determined what product needs to go to each site, the pick lists must be distributed.
- The picker will get a pallet and go to the 1st container on his sheet and stack the product evenly on the pallet.
- He/She will record the quantity, lot number and expiration date onto the pick sheet.



Picking Product

- When she/he has completed all picks, the pallet will be taken to the staging area.
- The Picker will double check the counts and attach the pick sheet.



Staging the material



- Segregate delivery locations and label the area.
- While in the staging area, Quality Assurance personnel should verify the counts, condition of the product and destination of each pallet.
- The pallet will then be wrapped and shipping will be notified.



Shipping

- Verify the pallets are for the location that the truck will deliver to with the Bill of Lading (BOL).



Shipping

- When shipping to multiple destinations, load the one to be delivered last on the truck first.
- Seal or lock the trailer.
- Provide a BOL or manifest to driver.



Record the shipment

Turn in the pick sheets to inventory control to have the quantities deducted from the inventory.



Receiving Additional Supplies

- Verify the seal with the BOL.
- Unload the contents of the trailer into a receiving area.
- Inventory the product, compare with manifest.
- Move product to storage location.
- Turn in paperwork to inventory control to add to the inventory.

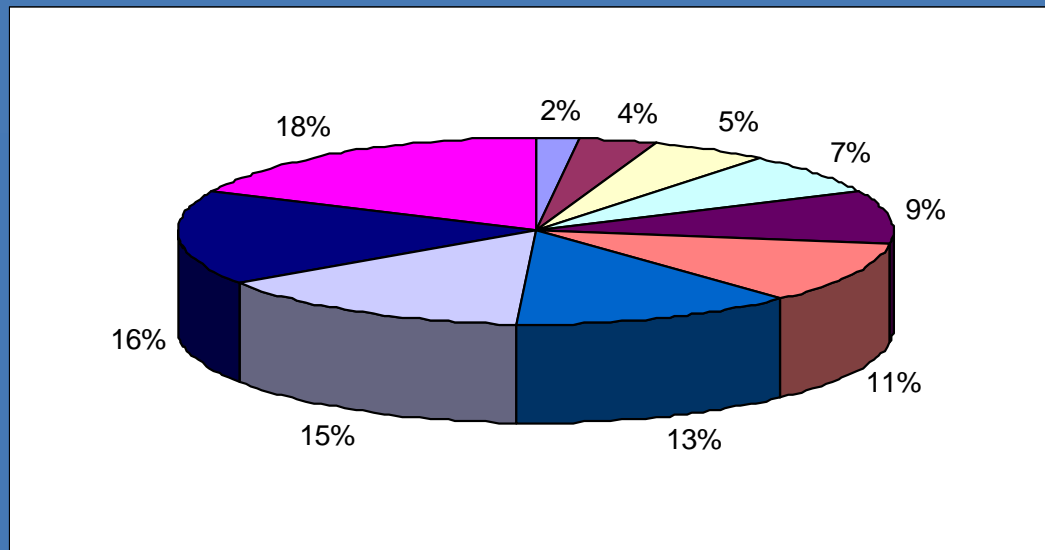


Most Critical Element

- Supervision
 - Ensure people fully understand the processes.
 - Follow the flow of the product and paperwork.
 - Give breaks.
 - Back patting.
 - Watch for dehydration and exhaustion.



APPORTIONMENT



Apportionment

- What do we do when we have more patients than supplies?
 - Apportionment is the dividing of available assets to dispensing and treatment sites based on expected patient counts.
 - Apportionment should be done with the immediate product available.
 - Follow-on supplies will fill shortages.



Responsibility

- The local authorities have control of the Push Package and can apportion it as they see proper.
- If assistance is requested TARU will advise and assist.



Apportionment

- Initial patient counts are estimates, updates will continue to come in. We need to get product to each site to start filling needs.
- Stick to pulling by full cases. Breaking them down from cases takes time, could damage product and make accounting more difficult.
- A quick method would be to take the population percentage of the dispensing site times the available assets. Round down to the next full case.



Apportionment By Percent

- If site A has 40,000 people out of a total of 400,000 people needing prophylaxis, they would get 10% of the available stock.
 - There are only enough unit of use of Cipro and Doxy to treat 300,000 people with in a push package.
(75,000 Cipro and 225,000 Doxy)
 - 10 % Cipro=7,500 bottles or 75 cases of 100
 - 10 % Doxy =22,500 bottles or 225 cases of 100
 - Round bottles to the nearest case (100)



Tables

- Logistics has tables to breakdown items based on the number of dispensing sites for unit of use, suspensions, chemical agents and hospital sites.



Unit of Use

	Cipro Cases/ POD	Doxy Cases/ POD
Number of Prophylaxis Points of Dispensing (PODs)	750 Cases of 100 10-Day Unit-of-Use Bottles [500mg Tabs]	2,250 Cases of 100 10-Day Unit-of-Use Bottles [100mg Tabs]
23	32 to 9 sites 33 to 14 sites	97 to 4 sites 98 to 19 sites
24	31 to 18 sites 32 to 6 sites	93 to 6 sites 94 to 18 sites
25	30 to 25 sites	90 to 25 sites
26	28 to 4 sites 29 to 22 sites	86 to 12 sites 87 to 14 sites

Unit of Use

	Amoxicillin Cases to The Indicated Numbers of PODs		
Number of Prophylaxis Points of Dispensing (PODs)	40 Cases of 40 10-Day Unit-of-Use Bottles [500mg Capsules]	40 Cases of 80 10-Day Unit-of-Use Bottles [500mg Capsules]	40 Cases of 480 10-Day Unit-of-Use Bottles [500mg Capsules]
23	0 to 6 sites----> 0 to 1 site-----> 1 to 8 sites----> 4 to 8 sites---->	5 to 6 sites----> 2 to 1 site-----> 1 to 8 sites----> 0 to 8 sites---->	1 to 6 sites 2 to 1 site 2 to 8 sites 2 to 8 sites
24	4 to 8 sites----> 0 to 8 sites----> 1 to 8 sites---->	4 to 8 sites----> 1 to 8 sites----> 0 to 8 sites---->	1 to 8 sites 2 to 8 sites 2 to 8 sites
25	8 to 1 site-----> 4 to 8 sites----> 0 to 8 sites----> 0 to 8 sites---->	8 to 1 site-----> 4 to 8 sites----> 0 to 8 sites----> 0 to 8 sites---->	0 to 1 site 1 to 8 sites 2 to 8 sites 2 to 8 sites
26	10 to 2 sites----> 2 to 10 sites----> 0 to 14 sites---->	1 to 2 sites----> 1 to 10 sites----> 2 to 14 sites---->	1 to 2 sites----> 1 to 10 sites----> 2 to 14 sites---->

Suspension Table

Number of Sites for Dispensing Oral Prophylaxis	Ciprofloxacin HCL Oral Suspension 250mg/5ml (100 ml) Bottle 24/Case Total: 167 Cases		Doxycycline Hyclate Oral Suspension 25mg/5ml (60 ml) Bottle 48 Bottles/Case Total: 334 Cases
1	167 cases to 1 site	1	334 cases to 1 site
2	83 cases to 1 site & 84 cases to 1 site	2	167 cases to 1 site & 167 cases to 1 site
3	55 cases to 1 site & 56 cases to 2 sites	3	111 cases to 2 sites & 112 cases to 1 site
4	41 cases to 1 site & 42 cases to 3 sites	4	83 cases to 2 sites & 84 cases to 2 sites
5	33 cases to 3 sites & 34 cases to 2 sites	5	66 cases to 1 site & 67 cases to 4 sites
6	27 cases to 1 site & 28 cases to 5 sites	6	55 cases to 2 sites & 56 cases to 4 sites
7	23 cases to 1 site & 24 cases to 6 sites	7	47 cases to 2 sites & 48 cases to 5 sites
8	20 cases to 1 site & 21 cases to 7 sites	8	41 cases to 2 sites & 42 cases to 6 sites
9	18 cases to 4 sites & 19 cases to 5 sites	9	37 cases to 8 sites & 38 cases to 1 site
10	16 cases to 3 sites & 17 cases to 7 sites	10	33 cases to 6 sites & 34 cases to 4 sites
11	15 cases to 9 sites & 16 cases to 2 sites	11	30 cases to 7 sites & 31 cases to 4 sites
12	13 cases to 1 site & 14 cases to 11 sites	12	27 cases to 2 sites & 28 cases to 10 sites
13	12 cases to 2 sites & 13 caes to 11 sites	13	25 cases to 4 sites & 26 cases to 9 sites

Apportionment

- Hit the ground running. If you get too detailed with apportionment, you will lose time in getting supplies to the dispensing and treatment sites.
- Follow up with the sites to see if their patient counts have changed.
- Be willing to pick up supplies from one site to deliver to another.



QUESTIONS?



CENTERS FOR DISEASE CONTROL & PREVENTION

