The goal of the Cities Readiness Initiative (CRI) Program is to aid selected cities in increasing their capacity to deliver medications and medical supplies from the Strategic National Stockpile (SNS) in the event of a large-scale public health emergency (anthrax attack). Though the goal of the CRI Program seems fairly straight-forward, the emphasis is focused on dispensing those medications to the entire population within a very short time frame – 48 hours. In that regard, CRI cities must plan for and collaborate on multiple levels to provide life-saving medications early enough within the event to make a significant health impact.

The CRI Program requires selected jurisdictions to plan for providing life-saving medications to the entire population within 48 hours in the event of an anthrax attack. The sheer magnitude of this requirement under the traditional dispensing model forces local planners to think “outside the box” and identify non-traditional methods. Only through a combination of traditional and non-traditional methods of dispensing will the goals of the CRI Program be achieved.

The purpose of this guide is to aid those jurisdictions within the CRI Program by “showcasing” Model Practices and Pilot Projects from around the nation. Through this guide, local public health planners and personnel will be able to consider ideas and alternatives to the traditional model of dispensing mass prophylaxis.

Please note that this guide is meant to be a “living” document, and as new Model Practices and Pilot Projects are identified, it is the hopeful intent that they will be included. While every effort was made to collect and share information on a broad range of dispensing methods, this document is not meant to be exhaustive research on all CRI methods.
Guide Structure

The structure of this guide is broken down into three main components:

1. **Background**
   Includes a brief description of the SNS Program as well as additional information regarding the CRI Program. Commonly used acronyms and terms are introduced and defined in order to ‘set the stage’ for their use throughout the guide.

2. **Traditional Method: Public Points of Dispensing**
   Within this section, the traditional method of dispensing will be briefly described for comparison purposes only.

3. **Alternative Dispensing Methods**
   Includes a comprehensive overview of a variety of dispensing methods and pilot endeavors. Within each method, the pros and cons are described (as applicable). This section serves as the ‘heart’ of the guide as it showcases Model Practices from around the nation.

Background

**Strategic National Stockpile (SNS)**

The Strategic National Stockpile (SNS) is a Centers for Disease Control and Prevention (CDC) program that serves as a national supply of medications and medical supplies for emergency situations. At pre-positioned sites throughout the United States, a repository of antibiotics, chemical antidotes, antitoxins, life-support medications, antivirals, IV administration, airway maintenance supplies, and medical/surgical items are housed and maintained. Within 12-hours, a SNS “push-pack” can be deployed anywhere in the United States and its territories to supplement and re-supply state and local health agencies during a national emergency. Additional components of the SNS may then follow in the form of vendor-specific products and items. State and local health agencies must have plans in place to receive either form of the SNS and then provide their contents to the population quickly and efficiently.

**Cities Readiness Initiative (CRI)**

Many have described the Cities Readiness Initiative (CRI) as simply “fast-paced SNS.” In reality, the only difference between CRI and generic SNS planning is the focused time constraint built into the requirements. Those cities who have been identified as CRI areas or regions, must use a given scenario as their planning goal or baseline – an aerosolized anthrax attack requiring the entire population to receive prophylaxis within 48 hours of the SNS arrival. The CRI Program as a whole is designed to strengthen the nation’s mass prophylaxis capabilities, by forcing jurisdictions to think proactively and creatively to achieve the above goal. CRI cities are selected by the CDC based upon their perceived threat or risk, and are awarded additional funding to assist with planning and preparedness endeavors.
Commonly Used Language

The following serves as a glossary of commonly used terms and acronyms in regards to SNS/CRI planning.

12-Hour Push Package
Cache of pharmaceuticals, antidotes, and medical supplies designed to provide rapid delivery of a broad spectrum of assets for an ill defined threat.

Distribution Site
Location where SNS materials are staged and organized for delivery to dispensing sites. The RSS is classified as a distribution site.

Dispensing Site
See POD

JITT (Just-In-Time Training)
Training that is performed for the first time as the individual (volunteer) begins his/her duties.

“Pull”
Used to describe a type of dispensing where the population is asked to report to a given site to receive medications (people are pulled to a given site).

“Push”
Used to describe a type of dispensing where medications are provided to the public at their current location (medications are pushed out).

Medical Model
A model of dispensing utilizing only medical personnel as dispensers, the flow consists of registration, triage, individualized medical assessments, education, dispensing, and forms collection. (Also known as the Clinical Model)

Non-Medical Model
A model of dispensing medications utilizing non-medical personnel as dispensers, the flow consists of registration, triage, and dispensing. (Also known as the Modified Medical Model)

POD (Point of Dispensing) Site
Location where medications are provided to large groups of people.

RSS (Receiving, Storing and Staging)
Location where the SNS material is received by the state health agency and broken down for distribution to local agencies.

“Closed”
Term used to describe a dispensing location that is NOT available to the general public and is meant to be used for a particular population.

“Open”
Term used to describe a dispensing location that is available to the general public.
Traditional Method: Public Points of Dispensing

In order to fully utilize non-traditional methods of dispensing medications, one must first fully understand the traditional model to serve as a baseline. Though the intended audience of this guide is likely familiar with planning for and using public points of dispensing, a quick review of the key concepts is always valuable. Furthermore, a brief review extends the scope of this document to include traditional SNS planning and can assist those audiences outside of established CRI areas.

Description

The traditional method for dispensing large amounts of medications has always been planned for the use of Public Points of Dispensing (PODs). Simply stated, public health agencies are to identify locations within their jurisdictions that large numbers of people could easily locate and access. These locations, ideally a high school, large auditorium, church, or combination thereof would then be organized into a functional dispensing clinic or POD.
Within the POD, areas would be set-up and staffed for each stage in the dispensing process – triage, education, dispensing, etc. – depending upon the model of dispensing used (medical or non-medical). PODs would be staffed by public health/government employees and volunteers for the entire duration of the event.

**Medical vs. Non-Medical Models of Dispensing**

A significant aspect of the dispensing process hinges upon the model followed. The Medical or Clinical Model of dispensing is a structured format where medical assessments and the actual dispensing process is overseen by licensed medical personnel. Typically, patients under this model are provided with an extensive educational session describing the agent, the medication, and any other relevant information. Documentation is very extensive and maintained for every patient. The Medical/Clinical Model is considered the most traditional method of dispensing for under the ideal circumstances, it offers the most protection.

The Non-Medical or Modified Medical Model of dispensing is a more streamlined process where patients are given a minimal amount of education and documentation at the site. Within this model, the emphasis is on providing medications to the most people in the quickest manner. To do so, non-medical personnel are used to dispense medications with minimal medical supervision. Individual stations within the POD are often compact and combined into one large area. The Non-Medical Model could be considered the preferred method of dispensing for those areas following CRI time-specific goals.

Within each jurisdiction, the dispensing model is determined by state statutes. In some states, only the Medical Model is allowed even under emergency situations. Other states mandate that the Medical Model be used in normal, non-emergency situations, but have drafted Executive Orders or Emergency Authorizations to use the Non-Medical Model in disaster situations. Such Executive Orders or Authorizations are vital to jurisdictions under CRI requirements. Though the Non-Medical Model may offer less liability protection, it allows for more people to receive prophylaxis in the least amount of time. Jurisdictions are encouraged to examine their dispensing statutes carefully and advocate for change as necessary. However, plans for setting up and operating a dispensing site must be reflective of the state’s allowable dispensing model.
At the heart of achieving the CRI goal of providing prophylaxis to an entire population in 48 hours is the ability to develop and utilize a variety of non-traditional methods of dispensing. These methods, when combined with the public POD system can significantly decrease the amount of time and staff needed for mass prophylaxis campaigns. The following information is a collection of Model Practices and Pilot Projects either in development or in actual use across the nation. Local public health agencies and their planners are encouraged to analyze each method and then determine the viability of its use within their own jurisdiction. This guide will not only help planners to think “outside the box” but provide them with the preliminary steps to develop these options within their own jurisdiction(s).

A Key Step – Identify a Specific Population

Within the traditional dispensing method, the entire population of a given jurisdiction is identified and planned for receiving prophylaxis at a Public POD. For non-traditional methods, it is best to first identify a specific population that can be ‘separated’ from those attending the Public PODs. By doing so, a significant burden is alleviated from the Public POD system. The dispensing load can then be spread out across a variety of different populations.

Specific populations include, but are not limited to:

• Corporation/Business Employees
• City/County/State Government Employees
• Nursing Home Residents
• Traditional First Responders (Police, Fire, EMS, Emergency Management, etc.)
• Sheltered-In Populations (Nursing Homes, Mental Health, Correctional, etc.)
• Hotel Employees and Guests
• College/University Students

For example, a large city government may wish to develop a method for providing medications to its employees so that they will not need to attend a Public POD and can continue their work during the crisis or perhaps even assist with POD operations. Therefore the specific population identified would be city government employees and their families. Once identified, the city health department can develop procedures to provide those employees and their families with the necessary medications.
Note: Any specific population identified should contain a medical oversight component. This component can consist of an in-house clinic and/or a contracted nursing agency. The need for the medical component is clear when dispensing medications based on health assessments. It is in the best interest of the population to ensure a medical oversight of some sort to provide additional liability protection.

Adapt a Dispensing Procedure

Once the specific population has been identified, work can begin on adapting a dispensing procedure. For example, in the previous scenario regarding the large city employee program, it may be determined that a Closed POD will be used to provide each person and his/her family member with the necessary medications. The POD dispensing procedure will then be modified to meet the needs of this specific population. A location will be selected, most likely a central government building, and employees will be made aware of the necessary procedures. The POD will be ‘closed’ to the public as its only goal will be to ensure prophylaxis of each city government employee and family member. Other procedures may be adapted as necessary, such as having each employee fill out the needed paperwork prior to any emergency event. This information can then be kept on-file and updated as needed.

Other dispensing strategies may incorporate stockpiling pharmaceuticals and supplies, providing medications to individuals prior to any event, direct delivery, drive-thrus, etc. These and other methods are described in fuller detail within this guide.

Model Practices and Descriptions

Business PODs

The over-arching goal of the CRI Program is to provide antibiotic prophylaxis to the entire population within 48 hours of a confirmed anthrax incident/attack. It has already been established that this goal cannot be achieved by Public Health alone using the traditional method of dispensing. In that regard, Local Public Health Agencies (LPHAs) must be willing to develop partnerships with a wide variety of sectors including business and corporations. There are thousands of businesses throughout the nation that employ millions of personnel. This aspect is seen by many within the CRI Program as an untapped resource for dispensing medications. If large businesses and corporations could dispense medications to their own employees and their families, then a large portion of the population would not need to report to a Public POD.
Description

A Business POD would simply be a “closed” dispensing site for employees only. In a pre-event fashion, a LPHA would approach a large business within its jurisdiction and enter into a Memorandum Of Understanding (MOU). Within this agreement, the following responsibilities would be outlined:

Other responsibilities than those above may need to be added and addressed by each jurisdiction separately. In any regard, LPHAs should develop a lasting relationship with the business community in developing a ‘fleet’ of Business PODs. Public Health should provide informational opportunities, training sessions, and ‘on-call’ consultation to assist businesses in developing this process.

From a business standpoint, this option could provide an immense sense of security. Personnel will feel more secure in knowing that their place of employment has a plan and the capability to provide essential medications in the event of a public health emergency (i.e. bioterrorism attack). This sense of security could not only foster employee loyalty and reduced turnover, it could also help a business resume its operations in a more timely and economical fashion. As employees and their family members are provided with essential medications, they will be more apt to return to work. The faster employees return to work, the faster the economy of the business and thus the community is restored.

Public Health Responsibilities

- Provide planning and technical assistance, including but not limited to supply lists, POD layouts, fact sheets, dispensing algorithms, etc.
- Ensure delivery/availability of the appropriate amount of medications in a reasonable, timely manner
- During the event, provide consultation and assistance as able
  - Provide information updates to the business as necessary
- Collect any unused medications and medical documentation
- Provide after-action consultation

Business Responsibilities

- Serve as a “closed” POD and dispense medications to only employees and their families
- Conduct pre-event medical assessments of all employees and their families – those assessments should be maintained and updated at least annually – copies of which should also be provided to Public Health
- Dispense medications properly with the necessary medical oversight
- Maintain accurate records of medications dispensed – provide those to Public Health
- Ensure access to emergency medical services and security
- Return any unused medications to Public Health
- Work with Public Health to correct any after-action issues
United States Postal Service Delivery

Serving as a core goal of the CRI Program, the United States Postal Service (USPS) has been contracted to work with some local public health jurisdictions to develop a plan to utilize volunteer postal carriers for delivery of prophylaxis directly to people’s homes during an event. The rationale for such a plan is that the USPS has the capability and experience in delivering items across a vast area in a given period of time. Additionally, the USPS operates and abides by a comprehensive database of postal zip code addresses. Agency personnel have the tools and knowledge to quickly provide medications to a large number of residences within 12-24 hours.

Description

Under the Postal Plan, volunteer postal carriers, escorted by armed security and provided personal protective equipment, will deliver one (1) bottle of medications and any necessary educational material to each residential household on a given delivery route. This bottle is NOT meant to serve as the full treatment course for the entire household, rather as the first few doses. By providing these first doses quickly, LPHAs will have additional time to set-up and staff the Public POD system. The Postal Plan is merely meant to serve as a ‘stop-gap’ and allow Public Health more time to set up the needed PODs to dispense the remaining treatment course. Once established, each household will send one (1) person to a Public POD to pick up the remaining medications.

Direct Delivery to Residences

Taking the core aspect from the Postal Plan, LPHAs may consider delivering medications directly to residences using a variety of methods. If for some reason the Postal Plan is not an option within a given area, direct delivery to homes can still take place.

Model Practice Example

The city of Chesapeake, Virginia with its population of 218,000 recently tested a direct delivery method to achieve CRI goals. Using public school buses, the city ‘pushed’ Antibiotic Packets out to a neighborhood of over 400 residences. Each Antibiotic Packet contained one (1) bottle of medication and two (2) information sheets. The Packets were left at each door-step with the instructions for each recipient to call an indicated number from their home telephone to confirm receipt. Each call was then mapped using Geographic Information Systems (GIS).

The delivery process utilized two (2) school buses, two (2) bus drivers, eight (8) dispensing personnel, and 2 police escorts. Overall, an estimated population of 1,100 was given medications in less than two hours.
From those results, planners within the Chesapeake Health Department further estimate that by utilizing over 200 school buses, ‘ready-made’ Antibiotic Packets could be delivered to the entire population in just over two and half hours. Such brevity and efficiency could encourage volunteer groups such as Community Emergency Response Teams (CERT) and the Medical Reserve Corps (MRC) to more readily participate and assist in the effort.

**Additional Description**

Although the above example utilized public school buses, any vehicle may be used for direct delivery. Governments may wish to use delivery trucks, fleet vehicles, box trucks, Public Works vans, or even contract out with a trucking company to provide the direct delivery method. Whatever vehicle is used, the goal remains the same to provide medications directly to the residence in a quick, efficient, and safe manner.

**Localized Stockpiles**

The stockpiling of medications is considered by many a very difficult process to achieve. Purchasing and storing medications that may expire prior to use is often considered as an unjustifiable expense. However, having a stockpile on-hand at the local level for specific populations may prove to be beneficial as a first-line of defense prior to the SNS arrival.

**Model Practice Example**

The State of Missouri is developing a stockpile program where a large cache of antibiotics will be maintained at strategic locations. This stockpile has been designated for hospital staff, hospital-based first responders, and the families of each in the event of a mass prophylaxis emergency. At the necessary time, one or all of the stockpiles will be activated and ‘pushed’ out to the hospitals for use. Each hospital must then develop procedures to either receive or pick-up their portion of the stockpile.

**Additional Description**

Holders of any localized stockpile will need to acknowledge the limited viability of the medications. Depending upon the type stockpiled, it is likely that they will only be useful for two to five years. A possible solution to extending the “life” of the stockpile would be to acquire the medications from a pharmaceutical company that is willing to rotate the near-expired medications. Under this partnership, medications within the stockpile nearing expiration would be rotated out to be used by a more fast-useage client. New medications would then replace the older ones, thus extending the life of the stockpile another expiration period. Without this or similar procedure in place, expired medications will simply have to be discarded and new ones will need to be re-purchased.
Drive-Thru PODs

For decades, the fast-food industry has used the drive-thru method to quickly provide food to its customers. People simply drive up to a particular window for payment and then drive to another to receive their food items. A fairly quick, simple, and efficient procedure can easily be adapted to the station-by-station POD flow.

Model Practice Example

In October of 2004 and 2005, the former Springfield Department of Public Health (now Sangamon County Department of Health – see Author’s Note below) conducted a drive-thru flu vaccine clinic in the city of Springfield, Illinois. For over four hours, cars were funneled into a large convention/sports facility through two entrance points. Prior to entering the building, each driver completed the necessary paperwork and a basic triage was performed. Traffic control and police then directed the cars into the building where they received their vaccinations. The facility itself was capable of handling the excess build-up of carbon monoxide; however additional fans were also used to dissipate the exhaust. Drivers then proceeded through two exit points out of the building. In all, approximately 1000 flu vaccine injections were given over the course of just four hours.

Springfield considered this Drive-Thru method from three different standpoints:

1. Weather – Drive-Thru clinics shelter individuals from inclement conditions by remaining in their vehicles or indoors.
2. Convenience – Fast-paced society has grown accustomed to Drive-Thru service as a quick and easy solution
3. Sanitation – Indoor solutions decreased the chance of airborne contaminants upon the vaccination site. Also, face-to-face contact among patients was eliminated; helping reduce disease spread. Finally, patients felt more secure knowing they would not contract an illness from another.

The key to this clinic’s success over its two-year use was identified as integrated planning and collaboration with Public Health, Law Enforcement, Public Works, and the medical community.

Additional Description

A key to any drive-thru process implemented will be to condense the dispensing process into the fewest stops possible. Under the traditional method of dispensing, patients can stop five or six times at varying points throughout the process. Within a drive-thru method, numerous stops would not be practical. Especially within a closed area, the fewer stops a vehicle makes, the less exhaust build-up – making it much safer for the staff. A drive-thru should only incorporate one to three stops at most. The first being a quick triage of the driver and form
completion. From there, the vehicle drives to the next stop where the forms are reviewed and the appropriate medications are dispensed. A third stop may be used to separate any of the above steps.

Utilizing the drive-thru dispensing method will require some fairly specific requirements. A large area will be needed to accommodate the significant traffic flow. In the example above, a convention center was used to ‘house’ the incoming and outgoing traffic, as well as protect the staff from weather. Other jurisdictions have considered using large open spaces such as parking lots and/or even NASCAR racing tracks. Though the dispensing process is not covered in such situations, it does allow for a fairly large traffic flow. Another specific requirement will be the robust emphasis on traffic flow and safety. A large number of vehicles within a confined space will need to be managed carefully to limit or even prevent accidents and traffic jams. Vehicles may also breakdown in the drive-thru line, causing planners to anticipate how they will be removed quickly to maintain flow.

Perhaps the biggest requirement will be to plan for the safety of the drive-thru staff. Hazards such as exhaust build-up, traffic accidents, and the security of not knowing what may be inside a particular vehicle will need to analyzed and mitigated.

[Author’s Note: The Springfield Department of Health officially merged with the Sangamon County Department of Health on March 1, 2006. As such, inquiries regarding the above-mentioned drive-thru flu vaccine clinic should be directed to the author for further information.]

Pre-Event Medications in the Home

The purchasing of medications to be used only under certain emergency conditions is a very new idea currently being tested in the United States. The goal is to provide an opportunity to citizens to store either Ciprofloxacin and/or Doxycycline within their homes and to take those medications only when instructed to do so. Under this method, specific medications will become part of a standard emergency supplies kit. If an emergency event were to occur, instructions would be provided over mass media and other means directing people to take these medications. By doing so, Public Health would have more time to set up public dispensing sites for future or additional courses of treatment.
First Responder Stockpiles

During any emergency event, first responder personnel (Police, Fire, EMS, Public Health, State, Federal, etc.) are essential in mounting any response or recovery activity to minimize loss of life and property. Emergency Management cannot exist in a vacuum and each first responder agency must work hand-in-hand to effectively mitigate and respond to any disaster event. Public Health Planners in their development of Mass Prophylaxis and CRI plans must recognize the need for collaborating with other first responder agencies. The process of setting-up and operating PODs cannot be accomplished without assistance from fire and police personnel. Public Health agencies in metropolitan areas are under-staffed to set-up and operate multiple PODs by themselves. In that regard, Public Health must fully collaborate with other first responders for needed support.

To ensure first responder support, Public Health can create a sense of protection and security for those groups by creating specialized options. First responders will need to know they and their family are safe before reporting to work. To create that protection and security, specialized stockpiles for first responders and their families ONLY could be created. Not only does this encourage assistance during the emergency event, it will provide a significant population with medications, lessening the demand on Public PODs.

Potential Model Practice Example

First Responder Stockpiles can take many forms. Some jurisdictions may wish to purchase medications in bulk and place the entire amount in a central storage area. Local planners and Public Health agencies would then maintain the stockpile and develop procedures for its use. Medical assessments for the first responder and his/her family can take place pre-event to significantly quicken the dispensing process. Once activated, first responders will report to a designated area to receive all the medications necessary for their family. Once the first course of treatment is underway, he or she can report to duty to assist with the emergency response.

Another option worth consideration would be to multiply the number of stockpiles throughout a given jurisdiction. Instead of having one central location for the stockpile, multiple sites would be used. Such an option is beneficial for large jurisdictions with multiple municipal governments. First responder agency buildings such as fire stations, EMS buildings, and/or police
stations could serve as the stockpile location. Each cache would only carry enough medications for that particular building and/or defined area. Once activated, procedures would already be in place to provide the medications to all personnel and his/her family. Using multiple sites not only spreads out the coverage area of each stockpile, but also places it within a familiar location to all personnel which will allow for easy reporting. If properly trained and allowed by legal statutes, first responder personnel could even act as dispensers for each stockpile making the program self-sufficient and freeing up Public Health staff/personnel to begin preparations for public dispensing.

**Additional Description**

As with the Localized Stockpile option listed above, the same concerns exist for the first responder version. Local governments will need to weigh all the options in purchasing such a large amount of disposable assets. However, the pros may outweigh the cons by establishing a stronger connection between Public Health and traditional first responders. Furthermore, a greater sense of security and protection is created for each first responder. CRI requirements will also more readily be achieved by providing a fairly large population with medications quickly to assist with dispensing medications to the remaining population.

**First Responder Equipment**

Similar to the First Responder Stockpile, this initiative focuses on providing medications to traditional first responders as just another piece of equipment. For example a package of Ciprofloxacin would be issued in the same manner a police officer is issued a bullet-proof vest. That medication packet would simply be part of the first responder’s gear.

**Model Practice Example**

Montgomery County, Maryland recently developed and instituted a program for its first responders called Bio-Pack. Within this program, each first responder is given a generic health assessment by a public health nurse. A standard medical screening/consent form is used to determine the most appropriate antibiotic (either Ciprofloxacin or Doxycycline).

Following that assessment, each responder is issued two (2) Bio-Packs containing:

- One (1) Bottle of Doxycycline (or Ciprofloxacin if more appropriate)
- Doxycycline (or Ciprofloxacin) information sheet
- Information about the Bio-Pack program
- Specific information relating to each first responder agency
- Family Letter to Private/Family Physicians
First responder personnel are to then store one (1) Bio-Pack at home in the appropriate conditions and one (1) Bio-Pack at work, preferably in a desk drawer, office, or locker. The Bio-Packs themselves consist of a standard, zip-lock, clear-sided, plastic pencil pouch. When instructed to do so, personnel will locate the closest Bio-Pack and begin taking the medication as needed.

As the medications near expiration, the Montgomery County Health Department will hold Replenishment Clinics to re-evaluate each first responder with a health assessment. New Bio-Packs will then be issued containing ‘fresh’ medications, while the old Packs will be destroyed.

All dispensing will be overseen by a licensed pharmacist and advanced medical assessments will be completed by a public health nurse.

In most cases, the Bio-Pack will become part of the first responder’s issued equipment or gear. Each responder will be accountable for both Bio-Pack and return them upon severing employment.

**Additional Description**

The Bio-Pack program has provided pre-positioned antibiotics to over 3,200 first responders. Instead of providing those same medications to each household and/or family member, the Bio-Pack program includes a letter for family physicians. This letter emphasizes the need for giving first responder families priority during an emergency event. Furthermore, the letter suggests that these family members should be provided with a prescription of the necessary antibiotics at the time of the biological attack. Since the family physician will already have the necessary information to conduct a medical assessment from the family’s medical records, a prescription could easily be written and provided.

Issuing medications as part of the first responders’ equipment or gear is a unique idea that combines the stockpile method with the pre-event medications in the home. Not only does this foster support from traditional first responders, it empowers them to be responsible for their own medications, thus relieving some of the demands on Public Health.

**Mobile PODs**

The ability to quickly set-up a POD is paramount in any mass prophylaxis dispensing operation. Precious time on the “48-hour clock” might be wasted by a jurisdiction simply trying to construct and organize its PODs. Having PODs already constructed, in compact form, would quickly accelerate the set-up process. Mobile PODs provide that opportunity. A Mobile POD is essentially any vehicle that houses and transports all the supplies needed to set-up and operate a fully-functional POD. These can include trailers, vans, box trucks, etc. Whatever vehicle is chosen must be able to store the necessary materials at all times, and be organized efficiently to allow for easy-use.
Mobile PODs serve two (2) essential purposes:

1. They provide an opportunity for Public Health agencies to efficiently store its POD supplies and materials in a manner that is easily transportable to each site.
2. For those jurisdictions that do not have sites identified or confirmed, Mobile PODs allow for any site to be utilized at the time of the event since the needed materials will already be on-hand.

**Model Practice Example**

The Mid-America Regional Council (MARC) is a voluntary coalition of city and county governments for the bi-state Kansas City region. Utilizing Urban Area Security Initiative (UASI) funding, city and county health departments within MARC developed and deployed eight (8) Public Health Trailers. Each trailer contains all of the materials necessary (excluding the medications) to set-up and operate a POD.

Some of the items included on each trailer are:
- Tables/Chairs
- Medical Supplies
- Computer Equipment (MEDS | POD)
- Office Supplies
- Thermal Scanner
- Waste Receptacles
- Medical Screens
- Stanchions/Roping
- Supply Carts

The primary goal of these trailers is to assist in the set-up of an initial clinic for prophylaxis of emergency first responders and their families at any location prior to the arrival of the SNS.

The Public Health Trailers may also be used in establishing seasonal influenza clinics, combating other communicable disease outbreaks, and serving roles in trainings and exercise events. These trailers are a regional asset, thereby allowing any jurisdiction in the MARC Region to call upon their use if the event is localized.

**Additional Description**

Mobile PODs allow a jurisdiction to house all the materials necessary to set-up a POD in an easily transportable fashion. Having this mobile resource enables the jurisdiction to utilize any location as a potential POD site. The materials are already “on-hand,” saving valuable time in trying to locate and organize. A so-called “POD in a box” can serve as an effective method for quickly dispensing medications to almost any identified population.
Hotel PODs

Many of the jurisdictions identified as ‘CRI cities’ focus on large population centers. Areas such as New York City, Kansas City, and Las Vegas all experience a fluctuating population on a daily basis. The populations of New York City and Kansas City increase each day with the influx of business commuters. Las Vegas not only shares this business commute increase, but also increases its population with significant tourism. With tourism comes hotels and other similar facilities that house visitors during their short stay. Planners must take this visiting population into account when planning for mass dispensing operations. Visitors and tourists will still need to receive life-saving medications within the 48-hour time frame. In that regard, planners may wish to designate hotels as Closed POD sites in order to dispense medications to hotel staff, staff family, and guests.

Pilot Project

The Southern Nevada Health District has recently begun a campaign to enter into agreements with Las Vegas hotels and casinos to serve as Closed PODs. By working with the hotel and casino security chiefs, the Health District hopes to enter into MOUs with major corporations serving the large tourism industry in Las Vegas. These MOUs will outline the responsibilities of both the hotel/casino and those of the Health District. As the program develops, materials and mass training sessions will be developed to educate the new partners on dispensing procedures. The success of this program could provide medications to over 800,000 people within the Las Vegas area.

Additional Description

Hotel PODs provide a unique option in planning for a fluctuating tourism population. Areas such as Las Vegas that experience a high tourism level each year should consider creating partnerships with hotels and corporations. Doing so would provide a method of assurance to visiting tourists that would be too unfamiliar with the area to locate a Public POD. Hotel staff could be trained on collecting the necessary information about their guests to then retrieve and dispense the medications without the guests leaving the hotel. Hotel staff could then remain at work to continue to provide services, knowing that they and their families are safe.

Sheltered-In PODS
(Nursing Homes, Mental Health Facilities, Correctional Facilities)

The traditional method of mass dispensing literally “pulls” the population to a given location in order to receive prophylaxis. Not only does this aspect create a host of logistical problems at the given facility, it neglects that portion of the population who are limited by special needs and other high-risk attributes. Conservative estimates indicate 20% to 30% of a given population is considered “special needs” or “high-risk.” These individuals are either limited by a physical or mental disability, have distinctive communication needs (differing languages, sign language, Braille, etc.), require additional care (nursing home, hospice, home health, etc.), or have restricted
liberties (jails, prisons, mental health, etc.). Under the traditional
treatment of dispensing, this portion of the population is underr- 
served because they cannot report to a Public POD site or they
cannot be accommodated because of the lack of resources.

To address this growing concern throughout the nation, many
jurisdictions have considered the creation of Sheltered-In PODs.
Instead of pulling the entire population to a given site, special
needs or high-risk groups would be provided with medications
in a push format. In other words, these groups would be pre-
identified and medically evaluated to receive medications during
a public health event. During an emergency, local public health
officials would provide medications to groups such as jails, nursing
homes, prisons, and hospices either in pick-up or delivery format.
By doing so, these populations that cannot or should not attend a
Public POD would still be provided with necessary medications.

Model Practice Example

The Oklahoma City County Health Department recently initiated the SIPs Program for
Sheltered-In-Populations. Within this program, the Health Department identified over 150
special needs facilities, representing 20% to 25% of the entire population. These facilities
were then broken down into three groups representing additional phases of the program.
Group 1 consisted of Jails, Nursing Homes, Group Homes, and Residential Care. Group
2 consisted of Hospices and Home Health, Independent and Assisted Living, and Mental
Health. Group 3 mainly housed Mobile Meal Programs such as “Meals on Wheels.” Once
identified, these groups were evaluated to determine the amount of medications that would
be needed for each resident, staff member, and staff’s family. (A general assumption of
95% Doxycycline and 5% Ciprofloxacin was used.) The necessary medical component of the
dispensing process was achieved by any on-site medical professional or the facility locating
a medically licensed relative of a staff member or resident. Once established, the facility
would then agree to send one representative to a secret SIPs Distribution Site to pick up
medications for the entire facility. Each facility was then required to develop and operate
their own dispensing process.

A recent exercise of the SIPs Program dispensed 50,600 doses of antibiotics in three hours,
with only nine (9) staff members.

Additional Description

The SIPs Program serves as a unique method for providing medication to sheltered-in
populations during a public health emergency. As a result, a significant portion of both the
general and special needs populations are identified and planned for. By empowering these
facilities to develop and operate their own dispensing processes, Public Health can better
focus on the larger population within the 48-hour limit. This focus can then be directed
towards those special needs populations that are not considered sheltered-in and will likely
report to a Public POD.

Another key aspect of this program that should be noted is the inclusion of the staff
member’s families. By planning for this additional ‘population,’ this program essential
addresses “two birds with one stone.” Workers at these facilities will feel more secure in
providing necessary services knowing that their own family is also taken care of.
Automated Decision Support Services for PODs

A common “hang-up” in the POD process has been identified as the registration and screening components. Patients are forced to fill out extensive medical history forms for each individual for whom they are obtaining medications so that the proper antibiotic is dispensed. That information must then be reviewed by medical personnel and evaluated using established algorithms. Only through the appropriate consultation and verification will the medication be dispensed. As can be imagined, this process is quite time-consuming and disadvantageous to a 48-hour deadline. If the registration and screening process were stream-lined using automated systems, countless minutes could be saved.

Model Practice Example

NexGenisys Health has created a commercially-available product to vastly improve mass prophylaxis operations. MEDS|POD™ is an integrated POD solution that stream-lines the process of providing medical treatment with clinical safety. Utilizing this scalable system, non-clinical personnel (under the Non-Medical model) can register and screen patients using the product’s Decision Support module. This module identifies a patient’s risk and directs them to the appropriate level of care. From that information, dispensers can then provide the proper medications/vaccinations. Patients will still have to fill out specialized Health Assessment forms, but the remainder of the process then becomes automated inside MEDS|POD™. Not only does this system serve a functional benefit inside the registration and screening process, it also monitors drug inventories and patient flow in real-time to reduce staff requirements. Additionally, the system creates printable medication labels and instruction sheets. All medical transactions are then archived for patient tracking and follow-up purposes.

Throughout the Kansas City area, many Public Health jurisdictions and hospitals have purchased and adopted the MEDS|POD™ system. A recent exercise of the system produced medication doses for 510 individuals in 75 minutes.

Additional Description

MEDS|POD™ provides Public Health with an essential option to safely manage a POD environment. This automated solution provides a quick and efficient sense of security in the chaotic atmosphere of providing hundreds of thousands of people with medications. Additionally, it attempts to provide this management with a paperless solution and allows for more efficient use of staff and patient time. Follow-up medications and recovery analysis will also be stream-lined by simply using the databases created within the system.
As indicated, there are multiple options to dispensing medications in a public health emergency. The twelve methods described in this document likely only scratch the surface of further methods to be developed. CRI cities should use this guide as a ‘roadmap’ in achieving the compliance guidelines set forth within the program. In no way should a jurisdiction adopt one single method and see it as the solution to beating the 48-hour clock. Multiple methods will need to be initiated and reinforced for CRI to even attempt to be achieved. Public Health must be willing to think ‘outside the box’ to address any dispensing hold-ups or issues. Partnerships must be formed and Public Health must be ready to reach the next level in emergency planning. Only then will the difficult demands of programs like CRI be fully overcome.

The author wishes to thank all the agencies represented and profiled in this document. Their input was invaluable to creating this guide and their ingenuity should be greatly recognized and appreciated.

Furthermore, all those who provided assistance and guidance throughout this process are sincerely acknowledged. Specifically, the Kansas City, Mo. Health Department, Mid-America Regional Council, and the National Association of City and County Health Officials.

Special thanks to Kim Nakahodo, Graphic Designer with the City of Kansas City, Mo., for her design assistance.

1 The SNS currently contains 5-6 million courses of Tamiflu, with the intention of increasing that supply to 50 million.
2 More information can be found within this guide and at the manufacturer’s website: http://www.nexgenisys.com/solutions/medspoddetail.htm
3 A consistent definition of a ‘family member’ is necessary, but unlikely given its controversial nature. Each jurisdiction or business may choose to define a family member differently.
5 Future planning endeavors should also address and reflect those individuals without home telephones.