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# BEST PRACTICE

## Strategic National Stockpile Distribution Planning: Selecting Facilities for Use as Dispensing Sites

### PURPOSE

Provides information and resources on selecting facilities for use as dispensing sites during Strategic National Stockpile (SNS) distribution.

### SUMMARY

The selection of SNS dispensing sites is principally the responsibility of local jurisdictions. Prior to an incident, local SNS planners will need to determine the types of facilities that are best suited for use as dispensing sites and identify specific sites. This planning process should include assessing the location of facilities, population density of areas being served, physical characteristics of the sites, and in-house facility support. Using this information, local planners should calculate an estimated throughput for each site (i.e., the number of patients the site can treat per hour). Selecting effective dispensing sites and maximizing throughput of the sites is vital to ensuring that dispensing operations are as effective and efficient as possible.

### DESCRIPTION

Local SNS planners will need to determine the number and location of dispensing sites based on such local characteristics as size, population density, transportation systems, etc. Dispensing site planning should be predicated on the requirement to respond to a large event with sufficient capacity to provide prophylaxis to the entire community. Local SNS planners need to recognize the relationship between the number of dispensing sites, the size of individual sites, and the number of individuals that can be treated. This will depend partly on the distribution of the population and available resources, personnel, and facilities.

This Best Practice provides SNS planners with additional information and resources to support their dispensing site planning efforts. It reviews processes for calculating the number of dispensing sites, criteria for selecting dispensing sites, recommended types of facilities, and assessing throughput of dispensing sites.

### *Calculating the Number of Dispensing Sites*

To calculate the number of dispensing sites required for a given area, the Centers for Disease Control and Prevention (CDC), Division of Strategic National Stockpile (DSNS) recommends using the following formula:

$$TP / (PPH \cdot S) / PPH = \text{\#sites required}$$

- **TP** is the total population to be provided prophylaxis;
- **HPP** is the total number of hours available for dispensing operation;

- **PPH** is the average number of patients moving through each dispensing site per hour; and
- **S** is the time required to setup dispensing sites for operation.

Using this formula, 79 dispensing sites are needed to provide pharmaceuticals to 2,000,000 people over a forty-eight hour period. This assumes each site could begin operations with six hours after mobilization, provide prophylaxis at a rate of approximately 600 people per hour, and operate continuously for 42 hours.

### **Criteria for Selecting Dispensing Sites**

There are no set standards for selecting facilities for use as dispensing sites. A variety of facilities have served as dispensing sites during historical events and exercises. The size of facilities used as dispensing sites can range from 18,000 square feet to 60,000 square feet.

There are a number of baseline considerations that planners should take into account when selecting the location and number of required dispensing sites. These include:

- Estimated travel times associated with local populations seeking treatment at the site;
- Facilities and locations that are familiar to the public;
- Facilities that are served by mass transit;
- Facilities with adequate indoor or covered waiting areas;
- Locations that are geographically dispersed;
- Population density in urban versus regional areas;
- Locations and source of staff required to operate the site; and
- Size, layout, and capacity of the facility.

The size of the dispensing site can vary; for example, one site identified in Tucson, Arizona, is 60,000 square feet, while a site identified in New York City is 18,000 square feet.

[DSNS Guidance Version 10](#) planning guidance recommends that the selected facilities include the following physical characteristics:

- Multiple points of entry and exit;
- Storage areas for medications and supplies;
- Adequate bathrooms, water, and electricity;
- Smaller rooms available for activities such as inoculations, compounding special doses, private interviews regarding personal medical histories, or to look after patients who are ill or symptomatic, who have special emotional needs, or who have special needs;
- Areas for workers to rest, eat, and sleep;
- Loading dock or other area to receive and stage delivered shipments of pharmaceuticals, preferably out of the public view and able to facilitate a 52 foot tractor-trailer truck;
- Ample parking space at or near the sites;
- Room, maneuverability, and access to the facility for those in wheelchairs and those in need of other mobility assistance;
- Adequate amount of room for seating and assisting the elderly and handicapped;

[Stats Indiana](#) provides users with demographic overviews for individual areas in Indiana. This includes total population broken down by race, sex, age, disability status, and household by type. Similar tools can help planners identify the population density of their communities.

- Heating and air conditioning to maintain room temperature between 68 to 77 °F; and
- Security features to protect patients, staff, and pharmaceuticals.

Planners should ensure that facilities to be used as dispensing sites provide basic utilities and other resources, including:

- Equipment (computers, printers, scales, photocopier, PA system);
- Basic in-house facilities (tables, chairs, lane roping, toilets, water, wheelchairs);
- Food service capabilities (kitchens, stoves, refrigerators) to feed staff;
- Supplies (toilet paper, soap, pens, pencils, paper, forms, bottled water); and
- Copiers and copy paper (to reproduce forms, informational materials for patients, and other materials).

The [Oregon Department of Human Services SNS Plan](#) includes a checklist of equipment required for a site serving up to 750 people.

Local planners should identify services and capabilities absent from each site, what external support and supplies will be needed at operating sites, and how they will provide sites with additional supplies and other support. Planners must also ensure that a facility under consideration as a dispensing site will be available during an emergency and is not part of other emergency response plans.

Once dispensing sites are selected, SNS planners must periodically visit sites to update site information, engage site owners or managers, and ensure the facility is ready to begin operations in the event of an emergency. Planners should visit each site once every six months.

### ***Recommended Facilities***

The types of facilities that meet the above criteria are large buildings with big, open, internal spaces. These include community centers, churches, public schools, gymnasiums, universities, stadiums, armories, and shopping malls. DSNS recommends maximizing the use of publicly owned and operated facilities because the public is familiar with these facilities, they are easy to find, they often have large parking areas, and are close to public transportation routes. Additionally, SNS planners and other health officials may find it easier to establish any necessary agreements and memoranda of understanding (MOUs) with other government agencies rather than with private sector entities.

When working with private facilities for dispensing sites, it is necessary to develop memoranda of understanding (MOUs) with the private ownership. [The Missouri Department of Health and Senior Services](#) has a draft MOU that can be easily formatted to include the name of any private facility to be used.

Several states, including New York and Missouri, and cities, including Chicago, plan to use public schools as dispensing sites for several reasons, including:

- Status as government-managed assets;
- Regional distribution in relation to population density;
- Physical characteristics including large halls to keep people in one area, multiple classrooms and multiple points of entry and exit;
- Designed to accommodate a large amount of people;
- On-site staff attributes, e.g., nurses and administrative staff;
- Number of public schools within a state; and

- Community's familiarity with local public schools.

Local SNS planners will have to work with local education officials to determine if—and which—schools can be used for SNS dispensing. One state's Commissioner of Education negotiated an agreement with the Lieutenant Governor (who held responsibility for Homeland Security) to allow the use of all public schools in the state for SNS dispensing activities.

DSNS recommends avoiding the use of hospitals, other healthcare facilities, or commercial pharmacies as dispensing sites. Healthcare facilities may be overwhelmed with sick individuals or individuals believing they are sick. Most commercial pharmacies lack sufficient internal space, parking, and operating areas for use as dispensing sites.

### ***Assessing Throughput of Dispensing Sites***

Throughput, or the number of people the site can treat per hour, is a measure of the site's efficiency. Local SNS planners should assess the total throughput of pre-selected sites by calculating the total number and location of dispensing sites and the population that needs to be served at each site. States should test their results through drills and/or exercises. Important factors affecting the throughput of dispensing sites include:

- Number of available staff and volunteers;
- Site design and layout;
- Informational tools to keep people moving and explain dispensing procedures;
- Reducing the number of stops to get drugs; and
- Ensuring adequate support, such as equipment, supplies, etc.

The New York City Department of Health and Mental Hygiene SNS plan provides for 203 dispensing sites to serve up to eight million patients. This has been calculated at a rate of moving 40,000 people through each site over 5 to 10 days. During the [TriPOD \(May 22, 2002\)](#) exercise, a single site was able to process over 1,400 patients an hour.

During an SNS Dispensing Exercise held on November 22, 2002 in [Tucson, AZ](#), over 2,000 volunteer patients were seen in 6 hours. Planners state that the system was never stressed and they are confident they could have treated 4,000 - 6,000 patients.

## **RESOURCES**

- American Society of Health-System Pharmacists. *Local Emergency Preparedness and Response: On the Road to Best Practices*. Midyear Clinical Meeting 2002, Georgia World Congress Center, Atlanta, Georgia. 10 Dec 2002. <http://www.ashp.org/emergency/educ-sessions2002mcm.cfm?cfid=24049094&CFToken=58780389>
- Centers for Disease Control and Prevention. *Receiving, Distributing, and Dispensing the Strategic National Stockpile Assets: A Guide for Preparedness - Version 10*, Jun 2005. ([LLIS.gov ID# 14197](#))
- Centers for Disease Control and Prevention. *SNS Preparedness Course*. 12-16 Jan 2004.
- Missouri Department of Health and Senior Services. *Memoranda of Understanding with Private Facilities for Public Health Crisis*. Unpublished.

- Missouri Department of Health and Senior Services. *Missouri's Planning Guide for Local Mass Prophylaxis: Distributing and Dispensing the Strategic National Stockpile. A Guide for Local Planning. Version 2 – Draft. Oct 2003.*  
([LLIS.gov ID# 8046](#))
- Oregon Department of Human Services. *National Pharmaceutical Stockpile Planning in Oregon: Information for Local Health and Emergency Management Officials.*  
Draft: interim=plan-3-02.  
([LLIS.gov ID# 14175](#))
- William K. Rashbaum and Judith Miller. "New York Police Take Broad Steps in Facing Terror." *The New York Times.* 15 Feb 2004.

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