

**Utah Department of Health**

**Antiviral Medication for Pandemic Influenza Plan**

**(Revised – January 29, 2008)**

## **Purpose**

This plan explains the processes involved with the acquisition, storage, and distribution of antiviral medications. This annex is a working document. Antiviral drug plans may be adapted to fit the scope of an actual event. The Utah Department of Health (UDOH) may use this plan as directed. Other related plans developed for emergency management and response at the State and/or the local and or tribal level will be consulted in an actual emergency.

## **Situations and Assumptions**

Planning for antiviral medication use is predicated on CDC worst case scenarios using 1918 Spanish influenza model. Assumed infection rates are approximately 25% of the general population in Utah using this model.

Antiviral medications may be used to counter the effects of novel strains of pathogenic influenza. Utah is currently developing stockpiles for pandemic influenza to augment stockpiles purchased by the Department of Health and Human Services (DHHS). The DHHS has purchased antiviral medications as part of the Strategic National Stockpile (SNS) Program, and stands ready for immediate deployment. Federal guidance indicates that Utah has been allocated 350,518 courses under the SNS Program. See <http://www.pandemicflu.gov/plan/states/antivirals.html> for further information.

Utah also has purchased antiviral medications under U.S. Department of Health and Human Services contracts for a State/local stockpile. Currently Utah has approximately 50,000 courses of treatment with plans to collect additional funding for more purchases.

## **Concept of Operations**

The antiviral stockpiles, including caches under Utah and SNS control, will be distributed and used according this plan. This plan will delineate information for a State purchased stockpile as well as a plan for distribution for all antiviral medications regardless of the stockpile implemented. This plan would be activated by the approval of the UDOH Executive Director's Office upon determination that there is a novel strain of influenza that threatens the public's health in Utah. The implementation of this plan will be under the direction of the UDOH Executive Director or his designee(s).

## **Antiviral Medication Distribution Planning Process**

The distribution of antiviral medication planning process involves incorporation of planning guidance as directed by the Centers of Disease Control and Prevention. This plan as well as other response plans are reviewed and developed using a committee

process. This portion will be reviewed as part of the Pandemic Influenza Workgroup conducted by the UDOH. Primary oversight of the Pandemic Influenza Workgroup is given to the State Epidemiologist. The Pandemic Influenza Workgroup is comprised of a broad cross-section of State and local public health, State Division of Homeland Security, healthcare organizations, and other related stakeholders. Attendees and membership roles can be provided upon request.

Local distribution efforts have been incorporated into this plan by providing local health officers and local emergency response coordinators with specific questions pertaining to distribution of antiviral medications. Further guidance and coordination will be included both in written and discussion formats. Likely pandemic influenza scenarios may include dispensing primarily to acute care centers for the treatment of patients. Dispensing, therefore, will be administered by health care professionals with local health department oversight for allocation, distribution to facilities, and reporting.

Delivery locations and routes will be identified for each LHD. Each transportation operation will be provided hard copy map quest documentation from the RSS to the LHD final destination.

Load planning will be considered as needed. Multiple deliveries from the same transport vehicle will be loaded accordingly, so the furthest destination will have product loaded first and the closest destination will have product loaded last.

The delivery schedule/frequency will be addressed as priorities are identified, with the most affected areas delivered to first and re-supplied as necessary.

The communication plan with RSS/Drivers/recipient locations includes the use of cell phones, 800 MHz radios, and Omnilink, an interoperable software that provides cross spectrum linkage of our communications devices.

Plans will be modified as exercise and real events indicate that changes are needed. Regular reviews of this plan will be included as part of the Pandemic Influenza Workgroup, or as needed by the UDOH program staff.

## **Key Issues to Support Antiviral Medication Distribution Planning**

The UDOH has identified several key issues for consideration in antiviral drug distribution and planning. Key issues were presented to a Governor's Task Force for consideration. The Governor's Task Force was comprised of a selected group of leaders throughout the State to provide recommendations for pandemic influenza planning issues. The Governor's Task Force supported the following issues pertaining to antiviral drug distribution:

- The UDOH should pursue funding for the purchase of a State/local stockpile of antiviral drugs.
- The UDOH adopts and follows National Vaccine Advisory Committee guidance for establishing priority use for the antiviral medications.
- The UDOH would allow local governments to purchase antiviral drugs as part of the State allotment under DHHS contracts.
- The UDOH would allow health care and other organizations to purchase antiviral drugs as part of the State allotment under DHHS contracts.
- The State/local stockpile would be allocated using a formula of 60% based upon population in a health district, 20% based upon the bed count of hospitals in the health district, and 20% to be retained for the UDOH to be used as an event discretionary cache.

This plan reflects decisions from the Governor's Task Force.

A Pandemic Influenza Workgroup is also involved in the development of planning concepts and related issues for pandemic influenza plans. The Pandemic Influenza Workgroup represents State and local public health, health care organizations, and related stakeholders. This plan has and will continue to receive input from the Workgroup.

## **Purchase of Antiviral Medication Stockpiles**

The UDOH has requested funding for the purchase of antiviral stockpiles as described in the CDC Guidance for antiviral drug purchasing. The UDOH also is actively seeking local government and health care organization funding to meet the total allocation for subsidy under the existing DHHS contracts. Efforts include provision of information to respective association meetings and one-on-one contacting.

Initial State and local caches were purchased and delivered in January 2008. Additional purchases will be funded from non-State entities such as county, city, and healthcare organizations. Any additional purchases will be accomplished before August 2008.

All purchased courses of antiviral medications under the State agreement with DHHS will be used under State guidelines as established in this plan for storage, tracking, and in administration.

The Strategic National Stockpile Program Manager has been designated as the purchasing agent acting under the oversight of the Executive Director's Office. Funding, cache management, and distribution coordination will be similarly directed.

The following table explains courses available and populations projected for coverage using the antiviral medications.

**Table 1. Projected federal antiviral stockpiling plans, including Utah allocation from federally purchased stockpile and the amount that can be purchased using federal/state matching funds under the federal contract.**

| Purchase mechanism                                   | Federal stockpile (courses <sup>1</sup> ) | Anticipated Allocation to Utah (courses) | % of Utah population who could be treated <sup>2</sup> |
|--|---|--|--|
| FY 2006 federal purchase                             | 20 million                                | 159,327                                  | 6.1 %  |
| FY 2007 federal purchase                             | 24 million                                | 191,192                                  | 7.4 %  |
| Federal Stockpile <sup>3</sup>                       | 44 million                                | 350,518                                  | 13.6 %   |
| State Stockpile <sup>4</sup>                         | 31 million                                | 246,956                                  | 9.6 %  |
| FY 2007 State funded purchase <sup>5</sup>           |   | 50,669                                   | 2.0%   |
| Currently available with State and Federal purchases |   | 401,187                                  | 15.5%  |
| Total stockpile possible                             | 75 million                                | 597,475                                  | 23.1 %   |

Table notes:

<sup>1</sup> A course is defined here as 10 capsules of oseltamivir and could be used either as a 5 day treatment course or as a 10 day post-exposure prophylaxis course; several courses would be needed for prophylaxis against infection for the duration of an influenza outbreak in a community during a pandemic.

<sup>2</sup> NOTE: Federal allocations of courses to provide 25% coverage to Utah’s population appear to have been based on the 2002 population; Utah’s 2006 population = 2,582,371. The coverage percentages above are based on 2006 population

<sup>3</sup> Federal stockpile is currently being purchased with the total purchase to occur in two parts. 20 million courses will be purchased using FY 2006 funds and 24 million using FY2007 funds.

<sup>4</sup> State stockpile described here is the amount that can be purchased using state-federal matching funds under the federal contract. The match is 25% federal to 75% state. Additional courses can be purchased under the contract at the contract price but without federal matching funds.

<sup>5</sup> The FY 2007 State funded purchase is based on the \$750,000 approved by the State Legislature. It reflects \$584,920 for oseltamivir (Tamiflu®), and \$165,083 for zanamivir (Relenza®).

## **Request Process for Antiviral Drugs**

The request process for antiviral drugs will be initiated at the local level as novel influenza becomes pandemic. Local health officers and tribal leaders have authority to request antiviral drugs from the UDOH. State procured stockpiles as well as SNS stockpiles will be allocated according to the predetermined split based on population (60%), hospital bed counts (20%), with a reserve of 20% allocated by the UDOH under the discretion of the Executive Director.

The initial cases of a novel strain of influenza identification would likely be part of an overall surveillance effort involving healthcare providers and laboratory testing. Specific information about the surveillance and detection of novel strains of influenza are addressed in surveillance and detection plans.

Once a novel strain of influenza is identified, the UDOH will be notified through existing channels including emergency hotlines such as 1-888-EPI-UTAH (1-888-374-8824) or 1-866-DOH-UTAH (1-866-364-8824). Reporting will result in notification of key responders as identified in emergency response plans and on-call rosters. The Utah Notification and Information System will be used to alert key responders and staff.

## **UDOH Policies and Administration**

The UDOH under the direction of the Executive Director or designee will convene a policy group with identified leadership. The determination to use existing antiviral stockpiles and requesting SNS stockpiles will be made in consultation with the State Epidemiologist and the Governor's Office.

General SNS plans will be implemented as needed for receiving, staging, storage, and distribution of antiviral stockpiles.

## **Emergency Operations Center**

The onset of a pandemic influenza outbreak will result in the establishment of a UDOH State Health Operation Center (SHOC). The Emergency Operations Plan for the State and the UDOH will be implemented for coordination of requests, transportation of antiviral medications, and related tracking. Plans for establishment of the UDOH SHOC are contained in the Emergency Operations Plans for the UDOH.

The SHOC will coordinate UDOH response to include Policy Group guidance, Planning Section, Operations Section, Logistics Section, and Finance Section information. Overall coordination with the State is performed by UDOH representatives at the State Emergency Operations Center (EOC).

## **Command and Control**

The antiviral stockpile distribution will use existing command and control policies for the UDOH, local health departments, and tribes. Compliance to the National Incident Management System will be maintained as part of any State incident response.

This plan will follow and adhere to existing UDOH titles and Incident Command System organizational command structures.

## **Notification and Information for Response**

The UDOH will notify response agencies including all local health departments, tribes, healthcare providers, other State agencies, and other stakeholders prior to distribution of antiviral stockpiles. The Utah Notification and Information System (UNIS) and other notification channels may be used. Agencies or individuals needing information will receive automated messages through land line phones, cell phones, email, fax machines, or pagers. People notified may be instructed to log in to the UNIS web-site for additional information. The UNIS web address is <http://health.utah.gov/unis>. Documentation, plans, and related information may be posted in UNIS as a secure web-based area for response partners. Emergency communications are also included as part of the UDOH Emergency Operations Plan. Redundant forms of communications including radio systems are also available as part of the UDOH all hazards preparedness planning.

## **Transportation and Logistical Support**

Distribution of antiviral medications may be coordinated as designated under ESF #1 of the State Emergency Operations Plan through the Utah Department of Transportation. The Utah National Guard also serves as a support agency to the Utah Department of Transportation under ESF#1 and can provide both ground and air transportation assets and personnel. Primary support coordinated by the State will consist of executing contracts with several transportation partners. Old Dominion Freight, A-1 Pioneer Moving & Storage, Bailey's Moving & Storage, DHL Express (USA), Federal Express Corporation, Bailey's Moving & Storage (Allied Van Lines), and UPS Freight are currently under contract with the State and can be used for emergency supply shipments. Additional resources may also be coordinated by the Utah Department of Transportation through the State EOC including State Motor Pool resources, and the Utah Transit Authority fleet resources. Local resources may be provided including smaller vehicle transportation options from the RSS facility or between points of dispensing in their jurisdictions.

If transport crosses tribal land borders, the Bureau of Indian Affairs (BIA) will be notified by UDOH. Decisions for the transport of medications will be dependant upon the need for rapid transport, security, and available resources.

Shipments of antiviral medications will be secured under the direction of the Utah Department of Public Safety. The Bureau of Indian Affairs (BIA) will be involved if distribution crosses tribal borders. The Utah Highway Patrol (UHP) under the Utah Department of Public Safety has the authority to secure shipments throughout the State. Supporting security agencies will be coordinated under UHP direction. Once shipments are completed to designated local health or tribal sites, custody will be signed to the receiving agency. Security will then be coordinated at the local level with the county sheriff's offices, or tribal police organizations.

Shipments of antiviral medications may be sent to the Utah RSS warehouse prior to the identification of novel strains of influenza in Utah. These shipments will be coordinated by UDOH staff, assigned local health department, or tribal staff as designated by the local or tribal health authority.

Distribution of State purchased, pre-staged caches will be performed under local and or tribal plans using local and or tribal resources.

Distribution of antiviral medication stockpiles will include logistical personnel support from the State as well as the local or tribal level as per our SNS Security Plan. Support includes UDOH staff trained and identified as part of the Logistics Support Team. Local health departments will be able to access volunteers through local Medical Reserve Corps. The Utah Division of Homeland Security coordinates volunteer resources throughout the State. Personnel used to support logistics of a distribution process would be coordinated as part of the UDOH Logistics Section in the Incident Command System.

Procurement of supplies related to the distribution of antiviral stockpiles will be coordinated by the Logistics Section with the Finance Section of the Incident Command System for the UDOH. Coordination for procurement will also be coordinated from the UDOH to the State Emergency Operation Center (EOC) and with the local EOCs as established.

## **Receipt of Antiviral Medications**

Caches of SNS supplied antiviral medications, PPE, and ventilators will be received as outlined in current UDOH SNS Plans. Warehouse facilities for receipt, staging, and storage include enactment of MOAs as noted in the UDOH SNS Plans and in the attachment for this plan.

State purchased caches of antiviral medications will be stored in pre-designated facilities such as hospital pharmacies, State operated warehouses, or in facilities identified by local health jurisdictions and approved by the UDOH. Criteria for storage of caches will include standard recommendations for environmental control and security. Storage will be coordinated by the UDOH and initial inventories of caches will be maintained by the

UDOH. The stockpile will include pre-positioned caches in outlying areas to allow rapid response.

Event driven stockpiles delivered to Utah as part of the SNS Program will be received through existing SNS plans. SNS plans include the use of large warehouse facilities with loading/unloading capabilities, security, communication access, emergency power, and staffing facilities.

Local facilities will include sites designated as part of the local SNS dispensing plans. The use of antiviral medications may be limited to healthcare dispensing if the event is limited or effectively mitigated. Dispensing to the general public will only be performed if treatment facilities are overwhelmed by need. Local health departments will be responsible for establishment of emergency points of dispensing or protocols for dispensing to those in need that are not able to receive medicines from treatment facilities or physicians. Use and allocation of local health jurisdiction allotments will be determined by the local health officers or tribal leadership for their respective jurisdictions.

Allotments are based upon immediate need and anticipated capacity of the healthcare facilities. Allocations from the State would then be shipped by the local health district or tribe (if applicable) to the appropriate hospitals, clinics, or treatment centers. The use of alternate dispensing models may be considered if treatment centers exceed capacity to respond.

LHDs or tribes will transport medications from a distribution center or pre-positioned cache sites to healthcare providers as described in local health department or tribal response plans.

## **Security Resources**

Security for antiviral medications at pre-event storage sites will be provided by existing staff and security resources. If SNS stockpiles are requested, primary security for the receiving warehouse will be under the direct supervision of the Utah Highway Patrol, supporting facility, and local law enforcement agencies. State resources for security are outlined in the State Emergency Operations Plan under the Emergency Support Function #13.

The Utah National Guard may also assist with site security, but will coordinate efforts with the UHP. State or local law enforcement presence is required, since National Guard personnel do not have arresting authority.

During ground transit, security will be provided by the UHP with possible National Guard assistance. Upon signing custody into local health, tribal, or healthcare custody, the primary security will be transferred to local law enforcement.

Air transportation resources also have been identified through the Utah National Guard as part of a Memorandum of Agreement (MOA) for SNS transport. If antiviral medications require rapid transport, security will be needed upon arrival at receiving sites. Security will be provided and coordinated at receiving sites by local or tribal authorities.

Security planning for air or ground transport will be communicated through local EOCs, LHDs, or tribes to the State EOC or SHOC. Shipments will not be sent if receiving sites can not assure proper security for personnel and supplies.

Additional security information is also included in the UDOH SNS Plan.

Local security resources will be coordinated by local authorities prior to signing medications into local custody. Local security resources will include county sheriff's, municipal police departments, and other assets as identified and designated. Local authorities also are tasked to assist treatment centers for security, as needed.

Requests for additional security support will be conducted through existing law enforcement agency protocols.

## **Chain of Custody**

The UDOH will provide all pre-event cache sites with appropriate chain of custody forms. Custody forms must be signed for all shipments of antiviral medications. SNS resources used will also be sent with chain of custody forms as part of the SNS plan.

Custody forms will be generated and signed by all parties storing, transporting, or dispensing antiviral medications. A standard form is maintained with the UDOH SNS Program. Forms may be modified or adopted as needed by the UDOH prior to or during an event. A sample copy is attached to this Antiviral Drug Distribution Plan. The CDC Resource and Inventory Tracking System (RITS) also is capable of producing forms that can be used as a chain of custody record and may be used to document chain of custody requirements for Utah.

Custody of antiviral drugs will be required to meet State and Federal regulations for prescription medications. Persons signing for custody will require appropriate credentials prior to signing for custody. Credentials will include State issued licenses, facility/organization identification, and State or Federal issued identity.

## **Supply Tracking**

State and federal antiviral medications will be tracked by the Utah Department of Health through the Resource and Inventory Tracking System (RITS) as established by the Division of the Strategic National Stockpile under the Centers for Disease Control and Prevention. RITS may be augmented by the use of WebEOC by the UDOH for

monitoring resources. Supply information will be requested as needed by State, LHDs, or tribes to ensure proper tracking and need for re-supply. An inventory management system is managed by UDOH in house IT personnel as well.

## **Patient Tracking Procedures**

The dispensing agency or organization is required to maintain a log of patient information for each course administered. The information required will include patient name, contact information, type of medication, lot number, and pertinent patient medical history. The administering agent or organization will also identify the priority group of patients or personnel receiving antiviral medications and a justification for the priority use.

Patient tracking information must be provided, upon request to the local health department, tribal health provider, or the UDOH. Patient information must follow existing State and Federal requirements as they apply for privacy and disease reporting. Tracking of antiviral medications may incorporate electronic reporting systems as approved by the UDOH.

## **Public Information**

The UDOH has adopted the National Vaccine Advisory Committee's guidelines for priority groups to receive antiviral medications. That means the medications will only be available to certain groups of people. In order to minimize concern on the part of the public, information must be made available prior to the incident outlining the pertinent aspects of the guidelines and how and to whom the medications will be administered. We will need to emphasize that there are antiviral drugs available only for treatment of patients with confirmed cases of novel influenza and healthcare workers with direct patient contact.

In order to counteract any undue alarm that may accompany this announcement, we need to provide information during the pandemic influenza outbreak that focuses on measures to prevent illness and what the public can do to improve their situation rather than antiviral medication use. We must also stress that at the time of an outbreak, work will begin on a vaccine, but it won't be ready for approximately six months.

As per the UDOH EOP, emergency communication plans, and information will be coordinated at a Joint Information Center. All necessary stakeholders will be invited to participate. Local partners will be included to ensure consistent and accurate messages.

## Apportionment Formula

The apportionment for health districts is based on the projected census data and current staffed hospital bed counts for each of the 12 local health jurisdictions. The Apportionment Formula is represented by the equation where A is the number of courses apportioned for a given health district.

$A = 0.6(\text{total courses available})(\text{area population}/\text{State population}) + 0.2(\text{total courses available})(\text{area hospital bed count}/\text{State total hospital bed count})$ . The factors of 0.6 and 0.2 represent the Task Force's recommendation of 60% based on population and 20% based on hospital bed count respectively. Total courses available may represent the sum of State purchased and Strategic National Stockpile courses combined. This formula does not consider tribal or other special populations, since those data are in the aggregate for local health district populations. Tribal populations may be subtracted from local health populations and calculated separately. This may be done if (a) tribe(s) desire to receive allocations directly from the UDOH. The Apportionment Formula does not include stockpiles reserved for State discretionary use. This State reserve will be 0.2 multiplied by the total courses available.

Apportionment of personal protective equipment and patient support supplies may follow the same formula for initial distribution. Initial allocations may then be evaluated and changed as necessary.

**Table 2. Projected census and hospital bed counts for Utah.**

| <b>Local health district</b> | <b>Population census estimate (2008)</b> | <b>Population as a percentage</b> | <b>Hospital bed counts (staffed)<sup>1</sup></b> | <b>Hospital bed counts as a percentage</b> | <b>Percentage of total courses available</b> |
|------------------------------|--|-----------------------------------|--|--|--|
| Bear River                   | 161,865                                  | 6.128                             | 199  | 3.67                                       | 4.41   |
| Central                      | 74,498                                   | 2.820                             | 130  | 2.40                                       | 2.17   |
| Davis                        | 278,408                                  | 10.540                            | 370  | 6.83                                       | 7.69   |
| Salt Lake                    | 1,026,646                                | 38.866                            | 2,890  | 53.36                                      | 33.99  |
| Southeast                    | 55,620                                   | 2.101                             | 143  | 2.64                                       | 1.79   |
| Southwest                    | 180,515                                  | 6.834                             | 392  | 7.24                                       | 5.55   |
| Summit                       | 38,959                                   | 1.475                             | 0  | 0  | 0.89   |
| Tooele                       | 55,494                                   | 2.101                             | 35   | 0.64                                       | 1.39   |
| TriCounty                    | 43,690                                   | 1.654                             | 81   | 1.50                                       | 1.29   |
| Utah                         | 470,986                                  | 17.830                            | 707  | 13.05                                      | 13.31  |
| Wasatch                      | 21,110                                   | 0.799                             | 19   | 0.35                                       | 0.55   |
| Weber                        | 233,683                                  | 8.847                             | 450  | 8.31                                       | 6.97   |
| Morgan                       |  |                                   |  |  |  |
| State reserve                | n/a                                      | n/a                               | n/a  | n/a  | 20   |
| Totals                       | 2,464,633                                | 100%                              | 5,416  | 100%                                       | 100%   |

**Note:** <sup>1</sup>Staffed hospital bed count data was provided by the Utah Hospital and Health Systems Association (updated February 1, 2007).

**Table 3. Possible courses available by local health jurisdictions**

| <b>Local health district</b> | <b>Percentage of total courses</b> | <b>Total subsidized courses available</b> | <b>State funded courses (2008)</b> | <b>SNS course allotment for Utah</b> | <b>Total possible courses available</b> |
|------------------------------|------------------------------------|---|------------------------------------|--------------------------------------|---|
| Bear River                   | 4.41                               | 10,891                                    | 2,235                              | 15,458                               | 26,349                                  |
| Central                      | 2.17                               | 5,359                                     | 1,100                              | 7,606                                | 12,965                                  |
| Davis                        | 7.69                               | 18,991                                    | 3,896                              | 26,955                               | 45,946                                  |
| Salt Lake                    | 33.99                              | 83,940                                    | 17,222                             | 119,141                              | 203,081                                 |
| Southeast                    | 1.79                               | 4,421                                     | 907                                | 6,274                                | 10,695                                  |
| Southwest                    | 5.55                               | 13,706                                    | 2,812                              | 19,454                               | 33,160                                  |
| Summit                       | 0.89                               | 2,198                                     | 450                                | 3,120                                | 5,318                                   |
| Tooele                       | 1.39                               | 3,433                                     | 704                                | 4,872                                | 8,305                                   |
| TriCounty                    | 1.29                               | 3,186                                     | 654                                | 4,522                                | 7,708                                   |
| Utah                         | 13.31                              | 32,870                                    | 6,744                              | 46,654                               | 79,524                                  |
| Wasatch                      | 0.55                               | 1,358                                     | 279                                | 1,928                                | 3,286                                   |
| Weber                        | 6.97                               | 17,213                                    | 3,532                              | 24,431                               | 41,644                                  |
| Morgan                       |                                    |   |                                    |                                      |   |
| State reserve                | 20                                 | 49,390                                    | 10,134                             | 70,104                               | 119,494                                 |
| Totals                       | 100%                               | 246,956                                   | 50,669                             | 350,518                              | 597,475                                 |

## **Administration of Antiviral Drugs to the Public**

The UDOH has adopted the National Vaccine Advisory Committee’s guidelines for priority groups to receive antiviral medications. Information may be found at <http://www.hhs.gov/pandemicflu/plan/appendixd.html>

The administration of antiviral drugs to the public will be performed under the authority of the local health departments. It is recommended that local health departments develop plans that include the following:

- Apportionment protocols for treatment centers
- Apportionment protocols for tribal jurisdictions and military facilities (if applicable)
- Measures to ensure adherence to priority groups

- Policies for health care providers to follow standard case definitions as may be recommended by the UDOH or the CDC
- Policies for health care providers to follow standard treatment protocols as may be recommended by the UDOH or the CDC
- Who will have prescriptive authority in respective jurisdictions
- Strategies to dispense drugs to patients unable to visit treatment centers
- Security protocols for storage, transport, and during administration of medications
- Security plans and coordination for treatment centers
- Local law enforcement risk assessments for receiving and dispensing sites
- Security assistance assurances to provide additional resources beyond current existing local resources
- Mass reproduction of pertinent information
- Patient tracking to ensure individuals are not receiving multiple courses
- Supply tracking information and data for usage and re-supply
- Recipient information including priority group and administration justification
- Data collection
- Adverse event tracking

Local health departments will focus initial distribution to treatment centers as patients present. Local health departments may or may not be required to open emergency dispensing centers as needs and circumstances change.

## **Antiviral Use and Priority Groups**

The antiviral medications contained in the Utah stockpile or distributed from the national stockpile will be used according to a priority group system that describes the characteristics of persons (e.g. severity of illness, preexisting conditions, role in response, etc.) in each priority group and the type of use (treatment, prophylaxis, or post-exposure prophylaxis for each priority group). The current priority group plan was approved by the Governor’s Taskforce on Pandemic Influenza Preparedness <<http://www.pandemicflu.utah.gov/docs/PandInfluTaskforceFinalReport.pdf>>. Changes to that priority group system will be approved by the Governor’s Pandemic Advisory Committee. The current priority groups along with estimates of the numbers of courses of antiviral medications needed to cover each priority group are included in Table 4. The estimates for the number of courses needed for each priority group are based on the NVAC estimates projected to the Utah population.

## **Implementation of Antiviral Use and Priority Groups:**

At the onset of Utah Pandemic Influenza Response Level B, a report of what is known about the pandemic will be prepared including epidemiologic patterns (i.e., overall and age specific case fatality ratios, attack rates, and hospitalization rates as available), the current status of the antiviral stockpile available for use in Utah, and an updated version

of Table 4 based on current population projections and any additional data on the size of priority groups that is available. That report will be reviewed by the Utah Pandemic Influenza Coordination Group. If the information suggests the need for alterations in the Antiviral Use and Priority Group plan, the Governor’s Pandemic Influenza Advisory Committee will be asked to review and make recommendations on that plan. In either case, a conference call will be convened with local health departments to review the plan and to identify local concerns that should be incorporated into that review.

**Table 4: Utah Priority Groups for Antiviral Medication use during a Pandemic (Approved by the Governor’s Taskforce for pandemic Influenza Preparedness. Based on National Vaccine Advisory Committee (NVAC) priority group recommendations:**

|    | Priority Group  | Type of Use <sup>1</sup> | US treatment courses <sup>2</sup> | Utah courses <sup>3</sup> | Cumulative | Source  |
|----|---|--------------------------|-----------------------------------|---------------------------|------------|---|
| 1  | Patients admitted to hospital <sup>4</sup>                                    | T                        | 7,500,000                         | 62,300                    | 62,300     | Federal stockpile will cover 350,500 treatment courses  |
| 2  | Health care workers (HCW) and EMS responders with direct patient contact      | T                        | 2,400,000                         | 19,900                    | 82,200     |   |
| 3  | Highest risk outpatients <sup>5</sup>   | T                        | 700,000                           | 5,800                     | 88,000     |   |
| 4  | Pandemic health responders <sup>6</sup>                                       | T                        | 900,000                           | 7,500                     | 95,500     |   |
| 5  | Increased risk outpatients <sup>7</sup>                                       | T                        | 22,400,000                        | 185,900                   | 281,400    |   |
| 6  | Outbreak response (nursing homes or other residential settings ) <sup>8</sup> | PEP                      | 2,000,000                         | 16,600                    | 299,000    |   |
| 7  | Critical health care workers <sup>9</sup>                                     | P                        | 4,800,000                         | 39,800                    | 337,800    |   |
| 8  | Pandemic societal responders <sup>10</sup>                                    | T                        | 2,700,000                         | 22,400                    | 360,200    | State stockpile would cover pandemic societal responders and about 236,900 (~60%) other outpatients |
| 9  | Other outpatients <sup>11</sup>   | T                        | 47,300,000                        | 392,600                   | 752,800    |   |
| 10 | Highest risk outpatients  | P                        | 10,000,000                        | 83,000                    | 835,800    |   |
| 11 | Other HCW with direct patient contact   | P                        | 32,000,000                        | 265,600                   | 1,101,400  |   |

Notes on Table:

<sup>1</sup> T = Treatment (requires a course of 2 capsules BID or 10 capsules and is defined as one course); P = Prophylaxis (requires 1 capsule each day for an assumed 40 days, or 40 capsules, i.e., 4 courses; more may be needed if the outbreak lasts longer than 40 days); PEP = Post-exposure prophylaxis (requires one capsule each day for 10 days, or 10 capsules, i.e., one course)

<sup>2</sup> Based on NVAC recommendations in HHS Pandemic Plan. Appendix D: NVAC/ACIP Recommendations for Prioritization of Pandemic Influenza Vaccine and NVAC Recommendations on Pandemic Antiviral Drug Use.

<http://www.hhs.gov/pandemicflu/plan/appendixd.html>

<sup>3</sup> Projections of the number of Utah courses were based on an assumption that the number of people in each priority group in Utah would be proportionate in size to the Utah population compared to the US population. The population estimates were from 2005 US census. US population estimate is 296 million, UT population is 2.47 million. UT population is 0.83% of the

US total. Many of the population sizes used by the NVAC were rough estimates and differences are possible between national estimates and Utah population.

<sup>4</sup> Patients admitted to hospital. This number would vary with the severity of the pandemic and capacity of the health care system. While not specified by NVAC, it is recommended in Utah that this group be considered to include those ill enough to be admitted to a hospital but for whom adequate hospital beds are not available as well as those actually admitted.

<sup>5</sup> The subset of persons designated by ACIP as at higher risk of influenza complications who are at highest risk, including persons with underlying illnesses placing them at greatest risk of severe complications (hematopoietic stem cell or solid organ transplant patients, immunosuppression due to treatment for cancer, hematological malignancy, or other illnesses such as rheumatoid arthritis, persons with HIV infection and CD4 count < 200, persons on dialysis, and women in 2<sup>nd</sup> or 3<sup>rd</sup> trimester of pregnancy).

<sup>6</sup> Public health workers involved in key pandemic response roles (e.g., vaccine administration, surveillance, antiviral distribution), public safety workers (police, fire and corrections personnel), and key government decision-makers (chief executives at federal, state, and local levels)

<sup>7</sup> The remainder of those currently designated by ACIP as being at high risk for influenza complications, including persons 6-23 months or >65 years of age, or with underlying illnesses as defined by ACIP.

<sup>8</sup> Treatment of cases and post-exposure prophylaxis to limit spread of influenza in settings where outbreaks pose substantial risk of serious morbidity, such as nursing homes.

<sup>9</sup> This recommendation is for prophylaxis for the duration of the outbreak in a community for personnel who are needed for effective functioning of selected critical health care units, including ED, ICU, and dialysis, and EMS units.

<sup>10</sup> This group includes persons who provide essential services that must be sustained during a pandemic to maintain public well-being, health and safety. It includes workers at health care facilities who have no direct patient contact, but are important to operation of those facilities, and utility (electricity, gas, water), waste management, mortuary, and some transportation workers.

<sup>11</sup> Includes persons with influenza not in any of the previously described priority groups.

Treatment of this group would help limit spread, limit time missed from work, and potentially reduce the burden on the health care system.

## **Vulnerable and Hard to Reach Populations**

The UDOH has developed baseline information for most of the unique populations within the State. Information for antiviral drug distribution will follow recommendations as part of the public information outreach during a pandemic outbreak. Issues addressed include language barriers, trust, mentally and physically impaired, etc. Liaisons and resources for communication to the vulnerable and hard to reach populations will be utilized to the extent that they are available.

Public messaging for the distribution of antiviral medications will be included to the extent that those who become ill should seek medical care as available. The antiviral medications will only be provided as part of treatment therapy, and not for mass prophylaxis. Pre-event messaging for pandemic influenza is being developed and implemented as part of the comprehensive planning for preparedness.

## **Tribal Populations**

At this time, Utah tribes contract with local hospitals and providers for services where hospitalization is required. The protocol for distributing antiviral medication to any hospitalized recipient would be the same for Utah's American Indian population. The American Indians Tribes of Utah will receive respective portions as part of the jurisdictional count based on population and hospital/clinical bed capacity.

Most of Utah's tribes cross state boundaries and local health department jurisdictions. Tribes are sovereign nations and have the inherit option to receive allocation directly from the UDOH. At tribal discretion, shipments may be coordinated with the local health department(s). Pre-event planning and coordination will be offered by the UDOH to tribes or tribal health clinics.

All tribal issues concerning the UDOH will be coordinated by the Indian Health Liaison. Planning and real event policies must follow UDOH Tribal Consultation Policy and meet the approval of the Utah Indian Health Advisory Board.

Tribes will be provided access to UDOH pre-scripted messages, public messages, educational tools, and support to assist in reaching their populations. State Tribal leaders may assist with or be responsible for translation of materials in their native language. The State Indian Health Advisory Board Liaison or designee will assist in accessing traditional communications i.e., KRCL radio, that is a familiar communication conduit for many of Utah's American Indians. Coordination for tribal response will be performed on a case-by-case basis as directed by the tribal officials, or tribal health care providers.

## **Military Installations**

Military installations will receive respective allocations as part of the population and aggregate bed count for local health districts. Military bases not participating in the response operations will receive supplies as coordinated through local health departments. Military organizations involved in response operations will receive medications directly from the UDOH. Existing local health SNS dispensing plans provide bulk medications to installation medical staff for internal use and dispensing. Hill Air Force Base will receive medications from the Davis County Health Department in an event where treatment is required on the Base instead of surrounding civilian hospitals and treatment centers unless other formal agreements are enacted. The Utah National Guard may receive medications directly from the UDOH if they are providing direct treatment to personnel. Other military installations will receive medications from their respective local health departments, if treatment is needed.

## **Training and Exercise for Antiviral Supply Distribution**

This plan and related response plans will be used as a tool in training and exercise development by the UDOH. Current training for pandemic influenza response is coordinated by the UDOH for staff, volunteers, and stakeholders. Exercise development for antiviral drug distribution includes the request, communication, and transportation for related products.

A Statewide Public Health Emergency Response Exercise (SPHERE) was completed by October 2007. Objectives and scenario were based upon a pandemic influenza response. Other agencies participated. Table top exercises prior to the September 2007 exercise and the evaluation were provided by the UCLA Center for Public Health Preparedness. After-action reports will be consulted to implement changes to this plan. Past training and exercise reports are archived in UDOH shared drives for review. A table top exercise for this plan was also offered to members of the Utah SNS Subcommittee. After action reports were used to modify this plan.

Local health departments, most of Utah's tribes, and local stakeholders have developed or are coordinating training and exercise plans for related pandemic influenza response. All training and exercise reports were encouraged to be submitted to the UDOH for review purposes.

Just-in-time (JIT) for RSS and related SNS positions is contained in the UDOH SNS Plan. All positions used to request, receive, stage, store, and distribute are included.

LHD plans also contain JIT training for points of dispensing (POD) sites and dispensing functions.

**Note: If you are an emergency planner and would like access to the complete plan, please contact Hannah Gehman at [hgehman@utah.gov](mailto:hgehman@utah.gov).**