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POD Squad

Colorado Full Scale Mass Vaccination Exercise

After Action Report/Improvement Plan

November 15-17, 2007



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EXECUTIVE SUMMARY

The 2007 *POD Squad* full-scale, statewide mass vaccination exercise was conducted by the Colorado Department of Public Health and Environment (CDPHE) Emergency Preparedness and Response Division (EPRD) in partnership with local public health departments and nursing services throughout the state of Colorado. *POD Squad* tested the following target capabilities:

1. Mass Prophylaxis
2. Emergency Public Information and Warning
3. Medical Supplies Management and Distribution
4. Emergency Operations Center Management

This exercise was designed to coordinate, manage, operate, and support a statewide mass vaccination Point of Dispensing (POD) exercise in Colorado to prepare for a potential influenza pandemic by evaluating the state and local public health capacity to perform the following measurable objectives:

State Health Department (CDPHE):

- Establish and maintain incident command at the CDPHE Department Operations Center (DOC).
- Establish and maintain timely and accurate communication with the State Emergency Operations Center, local public health agencies, and media.
- Establish, maintain and communicate statewide situational awareness for pharmaceuticals, volunteers and other resource needs.
- Evaluate the ability of the RSS and RTP staff to obtain, transport, distribute, maintain and track flu vaccine supplies in accordance with SNS plans prior to an event.
- Establish and maintain incident command at the CDPHE mass vaccination exercise site per organizational charts, protocols and procedures established by the CDPHE Immunization Program.
- Develop, coordinate, and disseminate accurate alerts and emergency information to the media and the public during an emergency.

Local Public Health Agencies (LPHAs):

- Obtain and maintain flu vaccine supplies and transport, distribute, and track these medical assets during an incident according to the state's Strategic National Stockpile (SNS) plan (*applicable only to LPHAs opening a Regional Transfer Point on November 16, 2007*)
- Establish and maintain Incident Command at the Point-of-Dispensing (POD) site per organizational charts, protocols and procedures established in the LPHA POD plan.
- Set up, operate and break-down a POD per protocols and procedures established in LPHA POD plan
- Establish and maintain timely and accurate communication with the CDPHE, local partners, the public, and the media, as applicable.

The exercise planning team was composed of numerous and diverse agencies, including representatives from:

- Colorado Department of Public Health and Environment
- Colorado National Guard
- Colorado Department of Human Services - Mental Health Division
- Colorado Department Public Safety-State Patrol
- Buckley Air Force Base
- Alamosa County Nursing Service
- Bent County Nursing Service
- Cheyenne County Public Health
- Costilla County Nursing Service
- Delta County Health and Human Services
- Denver Health and Hospital Authority
- Eagle County Public Health Nursing Service
- Elbert County Public Health
- El Paso County Health Department
- Grand County Public Health Nursing Service
- Gunnison County Public Health
- Kit Carson County Health and Human Services
- Larimer County Department of Health
- Lincoln County Public Health
- Mesa County Health Department
- Northeast Colorado Health Department
- Northwest Colorado Visiting Nurse Association
- Park County Public Health Nursing Service
- Prowers County Public Health Nursing Service
- Pueblo City-County Health Department
- Saguache County Public Health Nursing Service
- San Juan Basin Health Department
- Summit County Public Health Nursing Service
- Teller County Public Health
- Tri-County Health Department
- Weld County Department of Public Health

In addition to several county Regional Transfer Point (RTP) and POD exercises conducted at the regional and local level, three statewide exercises led up to the culmination of *POD Squad*:

1. 2005 Functional Exercise “*Fowl Play*”
2. 2006 Advanced Tabletop “*Squawk Talk*” (October 2006)
3. 2006 Functional Exercise “*Squawk Talk*” (December 2006).

These exercises tested state and local Department Operations Center (DOC) operations, Receipt, Store and Stage (RSS) warehouse functions, and interoperable communication capabilities of state and local public health agencies with multiple response partners during a simulated public health emergency. Per Homeland Security Exercise and Evaluation Program (HSEEP) guidance, *POD Squad* tested corrective actions that were identified during these three exercises.

The EPRD Exercise Planning Team, in coordination with twelve regional exercise points of contact (POC), started planning for the *POD Squad* exercise in January 2007. During this 11-month time frame, EPRD conducted numerous conference calls with the regional POCs in an effort to coordinate regional and local aspects of the exercise. Some of the larger issues discussed

during the planning process included:

- Selecting the appropriate Target Capabilities and related objectives to test and evaluate
- Determining the schedule and number of days required to test the necessary objectives
- Determining structure and participation for each day of the exercise
- Coordinating the purchase and reimbursement of vaccine for each LPHA that participated
- Developing a process for coordinating and communicating with Controllers and Evaluators at the 29 POD sites, 3 RTP sites, RSS site and the CDPHE DOC and POD site
- Developing a process for coordinating state, regional, and local public information releases and media interest for the exercise

The purpose of this report is to analyze exercise observations, identify strengths to be maintained and enhanced and to identify areas for improvement.

Major Strengths

The major strengths identified during *POD Squad* are as follows:

Medical Supplies Management and Distribution

1. RSS and RTP Security
2. RSS and RTP Incident Command
3. Flexible, knowledgeable staff at the RSS, RTP and CDPHE DOC sites

Emergency Operations Center Management

1. CDPHE Department Operations Center activation and security
2. Use of Incident Command System
3. Use of redundant communications methods, including Amateur Radio Emergency Service (ARES)

Mass Prophylaxis:

1. Strong external agency and local community partnerships
2. Flexible, adaptable POD staff
3. Internal POD communications

Emergency Public Information and Warning

1. Media relations, including:
 - Developing press releases
 - Answering reporter inquiries
 - Coordinating press conferences and interviews
 - Rumor control
 - Monitoring and providing information on potential barriers- such as protestors at Denver POD site

Primary Areas for Improvement

Throughout the exercise, several opportunities for improvement were identified for both CDPHE and local public health departments. The primary areas for improvement, including recommendations, are as follows:

Medical Supplies Management and Distribution

1. Inventory management and resource tracking
2. Additional staff training on SNS plans and protocols
3. Revision of RSS/RTP forms
4. Enhancement of vaccine efficacy during transport

Emergency Operations Center Management

1. CDPHE data collection from LPHAs
2. Revision of internal ICS forms
3. Revision of external communications protocols

Mass Prophylaxis:

1. External POD communications - at a minimum, all POD sites will be required to have an accessible landline phone and one other redundant form of external communications.
2. Advanced use of the Incident Command System (ICS) structure and forms – such as increasing use of area command and using consistent ICS forms.
3. POD site security, including:
 - External and Internal Security
 - SNS Asset/Resource Security
 - Staff CredentialingLPHAs are encouraged to solicit assistance from security and/or law enforcement partners in their community when developing POD security protocols and procedures.

Emergency Public Information and Warning

1. Need to strengthen relationship and interaction between CDPHE Office of Communications and local public health agency public information officers
2. Need to create and maintain updated contact list for all LPHA PIOs
3. Need to develop a better system for data collection and sharing situational updates with external JIS partners
4. Education of LPHAs on state vs. local responsibility for conducting local media outreach

Overall, the *POD Squad* exercise was very successful and was beneficial for both the participating LPHAs and for CDPHE. Not only were LPHAs able to test and evaluate their local POD plans and test their mass prophylaxis efforts in real-time with real patients, they were also able to identify areas of improvement that, once mitigated, will help to strengthen their ability to quickly vaccinate members of the community in the event of a public health emergency. CDPHE has also identified future areas of improvement related to mass vaccination, medical materials distribution, emergency operations center management and public information and has

already begun to initiate actions that will help to improve public health preparedness and response activities in the future.

Future exercises will continue to focus on communications between CDPHE, local public health and external agencies. External communications was listed as the area in most need of improvement for both CDPHE and for the multiple POD sites that participated in the exercise. In addition, CDPHE and LPHAs will re-evaluate and improve current plans, policies and procedures as necessary. For example, LPHAs will be encouraged to re-evaluate pre-selected POD locations to ensure that the POD sites have the necessary infrastructure and communications capabilities needed to conduct operations during an emergency event. By conducting exercises like *POD Squad*, state and local public health staff, as well as partner agencies, are able to practice and improve response activities, ensuring that Colorado will be better prepared to respond to a large-scale public health emergency.

SECTION 1: EXERCISE OVERVIEW

Exercise Details

Exercise Name

POD Squad Full Scale Mass Vaccination Exercise

Type of Exercise

Full Scale

Exercise Start Date

November 15, 2007

Exercise End Date

November 17, 2007

Duration

15 hours total

Locations

Colorado Department of Public Health and Environment, Denver
Receipt, Stage and Store (RSS) Warehouse, Denver
Colorado Department of Local Affairs – Division of Emergency Management,
Centennial
Tri-County Health Department, Commerce City
Buckley Air Force Base, Aurora
Southeast Regional Transfer Point, La Junta
South Central Regional Transfer Point, Colorado Springs
San Luis Valley Regional Transfer Point, Alamosa
Adams County Point of Dispensing (POD), Thornton
Alamosa County POD, Alamosa
Bent County POD, Las Animas
Cheyenne County POD, Cheyenne Wells
Costilla County POD, San Luis
Costilla County POD, Blanca
Denver County POD, Denver
Douglas County POD, Highlands Ranch
Delta County POD, Delta
Eagle County POD, El Jebel
Eagle County POD, Edwards
Eagle County POD, Eagle
Elbert County POD, Kiowa
El Paso County PODs, Colorado Springs
El Paso County POD, Fountain
El Paso County POD, Monument
Grand County POD, Granby

Gunnison County POD, Gunnison
Lincoln County POD, Hugo
Mesa County POD, Grand Junction
Morgan County POD, Brush
Park County POD, Bailey
Prowers County POD, Lamar
Saguache County POD, Saguache
Summit County POD, Breckenridge
Summit County POD, Silverthorne
Teller County POD, Woodland Park
Weld County POD, Fort Lupton

Sponsor

Colorado Department of Public Health and Environment (CDPHE) Emergency Preparedness and Response Division (EPRD)

Program

Department of Health and Human Services (HHS) Centers for Disease Control and Prevention (CDC) Public Health Emergency Preparedness (PHEP) Cooperative Agreement - Budget Period 8 (2007-08)

Mission

Protect
Response

Capabilities

Mass Prophylaxis
Emergency Public Information and Warning
Medical Supplies Management and Distribution
Emergency Operations Center Management

Scenario Type

Mass vaccination of the public during severe influenza pandemic

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Regional Points of Contact:

Public health regional points of contact (POCs) were selected from each of the nine All-Hazards Emergency Management Regions in Colorado (*see Appendix B*) to assist in exercise planning and coordination activities for the Points of Dispensing (PODs) that were activated in each region on November 17, 2007. The names and contact information for the regional POCs are listed below:

North Central Region Point of Contact

Melanie Simons
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Denver, CO 80246
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Northwest/West Region Points of Contact

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Northeast Region Points of Contact

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Southeast Region Point of Contact

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South Region Points of Contact

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San Luis Valley Region Point of Contact

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Alamosa, CO 81101
719-587-5213
dosborn@alamosacounty.org

South Central Regional Points of Contact

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Colorado Springs, CO 80910
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lisapowell@epchealth.org

Mike Wagner
El Paso County Health Department
301 South Union Blvd
Colorado Springs, CO 80910
719-578-3117
mikewager@epchealth.org

Participating Organizations

Local public health agencies opening a POD on November 17, 2007:

Northwest Region

Eagle County Public Health Nursing Service
Grand County Public Health Nursing Service
Summit County Public Health Nursing Service

Saguache County Public Health Nursing Service

South Central Region

El Paso County Department of Health
Park County Public Health Nursing Service
Teller County Public Health

Southeast Region

Bent County Nursing Service
Prowers County Public Health Nursing Service

Northeast Region

Cheyenne County Public Health
Lincoln County Public Health
Northeast Colorado Health Department
Weld County Department of Public Health

West Region

Delta County Health and Human Services
Gunnison County Public Health

North Central Region

Denver Health and Hospital Authority
Elbert County Public Health
Tri-County Health Department

San Luis Valley Region

Alamosa County Nursing Service
Costilla County Nursing Service

Local public health agencies supporting POD operations on November 17, 2007:

Homeland Security Exercise and Evaluation Program (HSEEP)
After Action Report/Improvement Plan (AAR/IP) POD Squad Mass Vaccination Full Scale Exercise

Northwest Region

Community Health Services, Inc
Garfield County Public Health Nursing
Service
Jackson County Nursing Service
Mesa County Health Department
Northwest Colorado Visiting Nurse
Association
Rio Blanco County Nursing Service

Southeast Region

Baca County Nursing Service
Kiowa County Nursing Service
Otero County Department of Health
(includes Crowley)

West Region

Hinsdale County Nursing Service
Montrose Health and Human Services
Ouray County Public Health Department
San Miguel Public Health

Southwest Region

Dolores County Nursing Service
Montezuma County Health Department
San Juan Basin Health Department
San Juan County Nursing Service
Southern Ute Nation
Ute Mountain Ute Nation

San Luis Valley Region

Conejos County Nursing Service
Mineral County Public Health
Rio Grande County Public Health

South Central Region

Chaffee County Public Health Nursing
Service
Lake County Public Health Nursing Service

South Region

Custer County Public Health Nursing
Service
Fremont County Public Health Nursing

Service

Las Animas-Huerfano Counties Health Dept
Pueblo City-County Health Department

Northeast Region

Kit Carson County Health and Human
Services
Larimer County Department of Health

North Central Region

Boulder County Public Health
Broomfield Health and Human Services
Dept
Clear Creek County Nursing Service
Gilpin County Public Health Nursing
Service
Jefferson County Department of Health

NOTE: Local public health agencies invited multiple county and regional-level partners to assist in conducting Point of Dispensing (POD) and/or Regional Transfer Point (RTP) exercise operations. For a complete participant list at each of the local POD and/or RTP sites, please reference the local After Action Report for the county of interest.

State Agencies:

Colorado Department of Public Health and Environment
Colorado National Guard
Governor's Office
Colorado Department of Human Services - Mental Health Division
Colorado Department Public Safety- State Patrol
Buckley Air Force Base
Colorado Department Local Affairs – Division Emergency Management

Private Organizations:

HealthONE
Express Messenger

Number of Participants

- 1906 Players
- 37 Controllers
- 67 Evaluators
- 46 Observers
- 13 Victim Role Players
- 12,038 members of the public vaccinated on November 17, 2007

SECTION 2: EXERCISE DESIGN SUMMARY

Exercise Purpose and Design

The CDPHE *POD Squad* full-scale mass vaccination exercise was developed as a three-day exercise to test the capabilities of state and local health departments to respond to a severe pandemic influenza outbreak. The exercise focused on the distribution of influenza vaccine from the Receipt, Store, and Stage (RSS) Warehouse to the Regional Transfer Points (RTP), managing mass vaccination clinics according to Points-of-Dispensing (POD) Plans, and coordinating ICS functions as well as public information at the CDPHE Department Operations Center.

Planning for the *POD Squad* exercise began in January 2007 at the Initial Planning Conference held at CDPHE. The exercise planning team was comprised of individuals from the CDPHE Emergency Preparedness and Response Division and the Immunization Program along with 12 public health regional points of contact who represented the nine Emergency Management All Hazards Regions in the state of Colorado.

During this initial planning meeting, the team began to develop a list of objectives. The team knew that specific protocols and plans should be tested to identify gaps- such plans and protocols included the following:

- State and regional Strategic National Stockpile (SNS) Plans
- State and local public health Point of Dispensing (POD) Plans
- CDPHE Joint Information Center Standard Operating Procedures (SOPs)
- CDPHE Department Operations Center (DOC) SOPs

The exercise also tested corrective actions that were identified from previous exercises conducted in 2005 and 2006 in which a pandemic influenza scenario was utilized.

In addition to determining the exercise objectives, the timeline for the exercise was established. The date of the exercise needed to meet the needs of both state and local participants. The CDPHE Immunization Program wanted to conduct POD operations in December 2007 to meet Centers for Disease Control and Prevention (CDC) recommendations that public health encourage citizens get influenza vaccinations later in the season. Local health departments had some varying opinions as to when the exercise should take place. Some were concerned that if the exercise was held in October, the vaccine may not arrive in time and the exercise would fail or need to be postponed (which would cause public information difficulties). Other local health departments wanted the exercise to take place in October to compete with the private influenza vaccination providers. In order to compromise, CDPHE EPRD selected dates in mid-November (avoiding the holiday season and other previously planned events taking place in late October and early November). The statewide POD exercise was also scheduled on a Saturday, enabling LPHAs to use pre-selected POD sites, such as schools, which would not be available during the week.

The exercise was divided into three days:

- November 15: CDPHE opened a mass vaccination clinic to vaccinate employees and first responders from agencies that have memorandums of agreement with the state health department.
- November 16: The CDPHE RSS Warehouse was activated to distribute and monitor the transport of vaccine to three RTPs in the Southeast, South Central, and San Luis Valley Regions. Tri County and Elbert County picked up their vaccine allotment from the RSS to test their ability to transport vaccine to the county PODs. The CDPHE Department Operations Center (DOC) was activated to coordinate information and resources.
- November 17: Twenty-nine PODs opened throughout the state to administer influenza vaccine to the public. The CDPHE DOC, several county emergency operations centers and the State Emergency Operations Centers (SEOC) were activated to coordinate exercise activities.

Funding for the POD Squad Exercise was provided by the Centers for Disease Control and Prevention (CDC) Emergency Preparedness and Response Cooperative Agreement, Fiscal Years 2005-2006 and 2007-2008.

Exercise Objectives, Capabilities, and Activities

Capabilities-based planning allows for exercise planning teams to develop exercise objectives and observe exercise outcomes through a framework of specific action items that were derived from the Target Capabilities List (TCL). The target capabilities form the foundation for the organization of all objectives and observations in this exercise. Each capability is linked to several corresponding activities and tasks to provide additional detail.

Exercise objectives and corresponding target capabilities and activities tested during this exercise are listed below:

State Health Department Objectives

Objective 1: Establish and Maintain incident command at the CDPHE Department Operations Center (DOC)

Objective 2: Establish and maintain timely and accurate communication with the State Emergency Operations Center, local public health agencies, and media.

Objective 3: Establish, maintain and communicate statewide situational awareness for pharmaceuticals, volunteers, and resource needs.

Capability Title: Emergency Operations Center Management

Activity 1: Activate DOC

Activity 2: Direct DOC Tactical Operations

Activity 3: Gather and Provide Information

- Activity 6: Provide DOC Connectivity
- Activity 7: Support and Coordinate Response
- Activity 8: Demobilize DOC Management

Objective 4: Evaluate the ability of the RSS and RTP staff to obtain, transport, distribute, maintain and track flu vaccine supplies in accordance with SNS plans prior to an event.

Capability Title: Medical Supplies Management and Distribution

- Activity 1: Direct Medical Supplies Management and Distribution Tactical
- Activity 2: Activate Medical Supplies Management and Distribution
- Activity 3: Establish Security
- Activity 4: Warehouse Operations and Distribution
- Activity 6: Demobilize

Objective 5: Establish and maintain incident command at the CDPHE mass vaccination exercise site per organizational charts, protocols and procedures established by the CDPHE Immunization Program.

Capability Title: Mass Prophylaxis

- Activity 1: Direct Mass Prophylaxis Tactical Operations
- Activity 2: Activate Mass Prophylaxis
- Activity 3: Conduct Triage for Symptoms
- Activity 4: Conduct Medical Screening
- Activity 5: Conduct Mass Dispensing
- Activity 6: Adverse Events Monitoring
- Activity 7: Demobilize

Objective 6: Develop, coordinate, and disseminate accurate alerts and emergency information to the media and the public during an emergency.

Capability Title: Emergency Public Information and Warning

- Activity 2: Activate Emergency Public Information, Alert and Notification Plans
- Activity 3: Establish a JIS
- Activity 5: Conduct Media Relations
- Activity 7: Demobilize Emergency Public Information and Warning

Local Public Health Agencies Objectives

Objective 1: Obtain and maintain flu vaccine supplies and transport, distribute, and track these medical assets during an incident according to the state's Strategic National Stockpile (SNS) plan (*applicable only to LPHAs opening a Regional Transfer Point on November 16, 2007*)

Capability Title: Medical Supplies Management and Distribution

- Activity 1: Direct Medical Supplies Management and Distribution Tactical
- Activity 2: Activate Medical Supplies Management and Distribution
- Activity 3: Establish Security

Activity 4: Warehouse Operations and Distribution
Activity 6: Demobilize

Objective 2: Establish and maintain Incident Command at the Point-of-Dispensing (POD) site per organizational charts, protocols and procedures established in the LPHA POD plan.

Objective 3: Set up, operate and breakdown a POD per protocols and procedures established in LPHA POD plan.

Objective 4: Establish and maintain timely and accurate communication with the CDPHE, local partners, the public, and the media, as applicable.

Capability Title: Mass Prophylaxis

Activity 1: Direct Mass Prophylaxis Tactical Operations
Activity 2: Activate Mass Prophylaxis
Activity 3: Conduct Triage for Symptoms
Activity 4: Conduct Medical Screening
Activity 5: Conduct Mass Dispensing
Activity 6: Adverse Events Monitoring
Activity 7: Demobilize

Scenario Summary

March – August 2007

In March 2007, the first wave of a severe influenza pandemic reached the United States. The pandemic has overwhelmed and altered healthcare, business, and government systems, which are working around the clock to recover communities worldwide. Public health experts and the media are comparing this pandemic to that of the 1918 flu pandemic. On a national level, 9,000,000 people in the United States are infected with the disease, and to date, 190,300 citizens have died. Colorado healthcare systems have reported 50,000 have been hospitalized during this first wave. Since influenza is a respiratory disease, overwhelming demand for respiratory therapists, ventilators, hospital beds and primary outpatient care has depleted medical resources. The Colorado Department of Public Health and Environment Vital Records Office reports 2,950 fatalities from February – July 2007.

International Health Regulations, developed in 2005, facilitated reporting and sampling of the disease, which originated in Asia and mutated over time. From these samples, vaccine research and development has been conducted, particularly to find a vaccine that would protect the public from deadly strains. Vaccine development has been ongoing in the United States for the past three years, as well as researching mutations of the disease.

Surveillance by epidemiologists and astute medical practitioners first identified the disease in Colorado in April 2006. Colorado was one of the first states hit with pandemic influenza in the lower 48 states. The Colorado Health Emergency Line for Public Information (COHELP) has also assisted with surveillance activities as well as serving as a call center statewide for the general public to call with questions or concerns about the pandemic. Hospital response plans

were implemented, isolating sick individuals. Newly revised triaging guidelines have been implemented to help keep less ill patients out of the hospital by moving these patients to alternate care facilities throughout the state.

Emergency Management has worked tirelessly to coordinate multiple disciplines to respond to the devastation. The Colorado Multi-Agency Coordinating Center (MACC) and the CDPHE DOC have been activated, as well as many local Emergency Operation Centers (EOCs).

The media has covered the changing faces of Colorado communities as they lose loved ones and have been providing information to the public about measures individuals and families can take to avoid the spread of disease. Since healthcare systems are overwhelmed, many families are caring for loved ones at home.

Morticians and funeral directors have altered the services they provide in order to meet the growing demand. Coroners have implemented mass fatality plans.

In June 2007, public health officials in many states initiated work quarantine for many healthcare workers to lessen the spread of disease. Containment and control measures (such as school closures and cancellation of public events) were also implemented by public health officials to slow the spread of disease. Respiratory hygiene guidelines and social distancing concepts for families and employers are heard on the radio around the clock. These actions have in fact slowed the rate of spread of disease in Colorado, which was projected to create much higher morbidity and mortality rates. However, these decisions were notably unpopular and contested by many members of the general public. The economic impacts of this pandemic have been devastating. Businesses are reporting a 30% absenteeism rate due to workers caring for sick family members, or employee illness and death.

According to World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC) experts, a second wave of the disease may surface toward the end of September in the United States. The second and possibly third waves of this disease have the capacity to increase morbidity and mortality nine fold. In the 1918 pandemic, 90% of the fatalities occurred in the second and third waves. The projections for morbidity and mortality during the second wave are that 125,000 more Coloradoans may need hospitalization, and 26,000 could die.

Since this is a global event; medical, pharmaceutical and food supplies have been in great demand. Utilities have been affected by high rates of absenteeism in the workforce. Sustaining first responders, who have already been overwhelmed with the first wave, is critical to obtaining the best outcome for our communities.

September 2007

The CDC announces in mid-September that a recently developed vaccine has shown promise to fight this strain of influenza. As the vaccine is currently in production, there are limited amounts of vaccine available for each state at this time. The CDC is allocating a small portion of the vaccine to each state, recommending that healthcare workers, first responders, public health

officials, and other essential, front-line staff receive the vaccine first. States will receive small shipments on a weekly basis.

Through coordination with the Governors Expert Emergency Epidemic Response Committee (GEEERC), Dr. Ned Calonge, Chief Medical Officer at the Colorado Department of Public Health and Environment announces that in accordance with Executive Order 3.1, Colorado's initial supply of vaccine will be provided to:

- Medical staff and public health workers involved in direct patient contact or other support services essential for direct patient care and vaccinators
- Public health emergency response workers critical to pandemic response
- Other public safety emergency response workers critical to pandemic response

The GEEERC begins to review CDPHE's pandemic influenza triage guidance in anticipation of altered standards of care and coordination of limited healthcare resources during the second wave of this pandemic.

November 2007

After numerous production delays, the CDC has confirmed that large doses of the new influenza vaccine are now available and will be distributed to each state via the Strategic National Stockpile (SNS).

On November 15, Colorado is notified that a shipment of 19,200 doses of vaccine will be arriving within the next 24-48 hours. CDPHE has activated the state SNS plan and is notifying staff and volunteers to report to the Department Operations Center (DOC) and the Receipt, Staging and Storage (RSS) warehouse. CDPHE is urging all regions to begin preparations for mass vaccination at pre-identified POD sites via the state call-down list. The National Guard has been called upon to deliver vaccine to Regional Transfer Point (RTP) sites in the Southeast and San Luis Valley regions via helicopter due to inclement weather conditions. All other RTP sites throughout the state will receive vaccine via ground transportation using pre-existing memorandums of understanding (MOUs) with transportation vendors and/or the Colorado State Patrol.

Local public health officials are working with partner agencies to implement Point of Dispensing (POD) operations in the following counties statewide: Adams, Alamosa, Bent, Cheyenne, Costilla, Denver, Douglas, Delta, Eagle, Elbert, El Paso, Grand, Gunnison, Morgan, Park, Prowers, Saguache, Summit, Teller and Weld. CDPHE's expectation is to have the first shipment of vaccine dispensed to the public within 48 hours of receipt.

SECTION 3: ANALYSIS OF CAPABILITIES

This section of the report reviews the performance of the exercised capabilities, activities, and tasks. The capabilities linked to the *POD Squad* exercise objectives are listed below, followed by corresponding activities, observations, references, analysis, and recommendations.

Capability 1: Mass Prophylaxis- November 15, 2007 CDPHE Point-of-Dispensing (POD)

Capability Summary:

Mass Prophylaxis is the capability to protect the health of the population through the administration of critical interventions in response to a public health emergency in order to prevent the development of disease among those who are exposed or are potentially exposed to public health threats. This capability includes the provision of appropriate follow-up and monitoring of adverse events, as well as risk communication messages to address the concerns of the public. Appropriate drug prophylaxis and vaccination strategies are implemented in a timely manner upon the onset of an event to prevent the development of disease in exposed individuals. Public information strategies include recommendations on specific actions individuals can take to protect their family, friends, and themselves.

On November 15, 2007 the CDPHE Immunization Program conducted a full-scale Point of Dispensing (POD) exercise to dispense influenza vaccine to CDPHE employees. The POD was conducted at the main CDPHE campus in building A. The CDPHE POD was evaluated using the HSEEP Mass Prophylaxis Exercise Evaluation Guide, which includes testing direct mass prophylaxis tactical operations, conducting triaging procedures, mass dispensing, and POD demobilization. The intended outcome is to ensure that critical medications (vaccinations and/or antibiotics) are disseminated to the general public in a safe time-efficient manner.

Activity 1: Direct Mass Prophylaxis Tactical Operations

Observation: **Strength** – *POD organization*

References: Not Applicable

Analysis: Several CDPHE POD organizational activities were not observed on November 15, 2007 as these activities took place prior to the exercise. The Immunization Program advertised the exercise in electronic bulletins distributed to CDPHE staff on a weekly basis. The Immunization Program also provided individuals who would be staffing the CDPHE POD with POD specific training and position assignments one month prior to the exercise.

Recommendations: None (*please reference recommendations for Activity 2*)

Activity 2: Activate Mass Prophylaxis

Observation: Area for Improvement – *Job duties not clearly defined*

References: Not Applicable

Analysis: Key staff from the CDPHE Immunization Program were notified via an exercise inject of developments in the exercise scenario on the afternoon of November 14, 2007. On the morning of November 15th, the CDPHE Immunization Program set up a POD in the CDPHE Departmental Operations Center (DOC). The Incident Commander called a staff meeting at 10:00 am to review the exercise objectives, scenario, and plan of action with POD staff. The CDPHE POD ran from approximately 11:00 am – 1:00 pm. Key ICS positions were identified via vests and communications were maintained throughout the duration of the exercise via 800 MHz radios and verbal face-to-face communications.

During the set-up of the CDPHE POD, key POD staff positions were identified by the Incident Commander and provided vests to wear for visual identification; however, no CDPHE POD-specific job action sheets (JAS) were distributed to POD staff. In a real event, position-specific JAS should be distributed to all positions if such resources are available. These JAS provide details about each position in the POD, roles and responsibilities for the assigned position, chain of command procedures, and other pertinent job specific duties. If the pre-developed JAS had been provided, POD staff, primarily CDPHE POD group leaders, may have had a better idea as to what they should and should not be doing during the mass vaccination process. Some POD group leaders were unavailable to provide technical assistance or to answer questions from their group members because the leaders were busy performing the necessary task at hand. For example, the Lead Vaccinator was actively vaccinating patients and was not readily available to answer other vaccinators' questions or to ensure that vaccinators were able to take necessary breaks during the POD activities. The goal of assigning a group lead is to provide oversight and guidance to those positions actually performing the task(s).

Throughout CDPHE POD operations, demographic and vaccine administration information was manually entered into the Colorado Immunization Information System (CIIS) web application onsite by CIIS staff. This information was also collected and entered into CIIS during the Elbert County POD on November 17, 2007. CIIS is a confidential, population-based, computerized life-long information system that collects and disseminates consolidated immunization information for Colorado residents. The system is operated by the University of Colorado Health Sciences Center under the Colorado Immunization Act. The CIIS application automatically created a report with the aggregate data from the POD exercise compiled in an XML file. This XML file was uploaded to CDC using the CRA file upload process. The file was successfully uploaded with the required information for the POD exercise being received at CDC within 48 hours after each clinic, as required by the exercise. The required reports were completed and uploaded without issues. The pilot of the CIIS system to collect, aggregate and

upload to CDC was successful. Because of the limited amount of resources needed to accomplish compiling, aggregating and uploading the information it would be beneficial to use this process in the future.

Recommendations:

1. EPRD should provide current copies of POD job action sheets (JAS) to the CDPHE Immunization Program, stressing the need for all staffed positions in the POD to be provided with JAS that include descriptions of roles, duties, and responsibilities for each position.
2. Ensure that lead staff members within the POD are available to assist their assigned groups by being technical assistants and monitoring the efficacy and efficiency of their specific POD function.

Activity 3: Conduct Triage for Symptoms

Observation: Area of Improvement – *initiating triage protocol*

References: Not Applicable

Analysis: The CDPHE Immunization Program utilizes the annually updated “*Epidemiological and Prevention of Vaccine-preventable Diseases*” document, which is produced by HHS and CDC, as their triaging guidelines document. This document is updated annually and was provided to the appropriate Immunization Program staff that would be assisting with triage activities. CDPHE staff established a designated triage and medical screening area at the beginning of the CDPHE POD entrance. Patients were asked to complete a medical screening form either before entering the CDPHE POD line (the form was sent to CDPHE employees electronically via email a few days before the exercise) or while they stood in line. Patients had to show their CDPHE employee IDs before being allowed to enter then POD. Once patients entered the triage and medical screening area, a CDPHE POD staff member preliminarily evaluated the patient to see if the patient was exhibiting any signs and symptoms of illness. If the patient was exhibiting any signs or symptoms, they were sent directly to the on-duty medical doctor at the CDPHE POD. The on-duty medical doctor made the determination whether or not the patient could enter the POD to receive the vaccination or if the patient needed to be taken out of the POD and sent to another facility for care. As soon as the patients were given the ‘all clear’ by the screeners and/or the on-duty medical doctor, patients were sent to a table staffed by a single CDPHE POD employee to discuss vaccine information, pertinent patient medical history and possible adverse effects.

The triage process for pandemic influenza was artificial for this exercise. Triage did occur during the CDPHE POD but it was noted that triaging was conducted under the auspices of seasonal influenza and not pandemic influenza or another highly infectious illness. *POD Squad* dealt with a pandemic influenza scenario, which under such circumstances, triaging for the vaccine would be a much lengthier process.

At one point during the exercise, an actor came through the CDPHE POD complaining of significant flu-like symptoms. The screener sent the client to the medical doctor on-duty who proceeded to send the client on to be vaccinated in the dispensing area. This non-adherence to triaging protocol was the result of the doctor not attending the final briefing prior to the start of the exercise where CDPHE POD staff were informed that this was a pandemic influenza vaccination scenario.

Recommendations:

1. The CDPHE Immunization Program will develop a sign-off sheet to accompany the current triaging guidance, as applicable. Once triage staff have read and understood the necessary information, they will sign off on this document to indicate they understand their duties.
2. All exercise players must attend all pertinent exercise trainings and informational sessions in order to participate in the exercise as appropriate.

Activity 4: Conduct Medical Screening

Observation: Strength – *Medical Screening*

References: Not Applicable

Analysis: CDPHE staff designated a triage and medical screening area at the beginning of the CDPHE POD entrance. Patients were asked to fill out a medical screening form either before entering the CDPHE POD line (the form was sent to CDPHE employees via email a few days before the exercise) or while they stood in line. Patients had to show CDPHE employee IDs before being allowed to enter then POD. As patients entered the POD, screeners evaluated them. These screeners would then send the patients on to a table staffed by a single CDPHE POD employee. This CDPHE POD staff member spoke to the patient about the vaccine, obtained pertinent information related to the patients' medical history, and possible adverse effects. Information was provided in English and in Spanish, and screeners were able to assist patients with special needs, such as being blind and needing to have all of the informational orally read to them. Conducting the medical screenings at the CDPHE POD was efficient also due to the fact that "line floaters" were placed throughout the line entering the POD so that they too could assist the patients with any questions, scan the line for potential illness issues, and help alert the CDPHE POD staff to any other situations that may have come up. This ability to screen patients quickly and accurately proved to be an asset to the CDPHE POD on November 15.

Recommendations: None

Activity 5: Conduct Mass Dispensing

Observation: Strength - *Innovative line 'floater' position in the POD*

References: Not Applicable

Analysis: As is expected during a mass vaccination event, large lines began to build as soon as the CDPHE POD opened at 11:00 am. Momentary bottlenecks in the patient line were quickly and effectively mitigated by “line floater” positions. Individuals assigned to this position moved from the screening and patient information stations to the dispensing stations to ease congestion and help keep the line moving. Assistance provided by these “floater” positions helped to reduce the amount of time that individuals waited in line to receive their vaccination.

Recommendations:

1. During future events and exercises, develop a Job Action Sheet and implement the “line floater” position at key stations throughout the POD.

Activity 6: Adverse Events Monitoring

Observation: Area of Improvement – *monitoring of patients after receiving vaccine*

References: Not Applicable

Analysis: CDPHE POD Operations were conducted from 11:00 am – 1:00 pm on November 15, 2007. All CDPHE employees, as well as local first responders, were invited to receive a free influenza vaccination at CDPHE one week prior to the exercise.

The CDPHE Immunization Program utilizes the Vaccine Adverse Events Reporting System (VAERS) for reporting any adverse event following a vaccination. It is a passive reporting system that can be filled out online or in paper format. These reports are submitted to the CDC. A ‘Vaccine Information Statement’ (VIS) document is also used to record common reactions to a specific vaccine and what symptoms to look for. The VIS is to be completed by the patient (or the patient's parent or guardian) at the time that the patient receives the vaccination. The CDPHE POD provided VIS forms to all participants throughout the duration of the POD exercise on November 15.

Most patients who received the influenza vaccine at the CDPHE POD were not monitored or kept for observation in case of an adverse event due to the vaccine. Most patients left the POD immediately after receiving the influenza vaccine. Patients were aware of the possibility of adverse events and were educated of such possibilities at earlier stations in the CDPHE POD. A station was set up at the end of the CDPHE POD with chairs and tables so that if people felt nauseated or ill after receiving the vaccination, they could sit and be monitored for additional adverse events. However, this area was not readily pointed out to patients going through the CDPHE POD.

Recommendation:

1. Modify / update the current “Exit Monitor” POD Job Action Sheet to reflect specifications for adverse events monitoring duties. This position will inform patients of potential adverse events and what signs to look for should they have an

adverse reaction from a vaccine or other medication. This position will also help to ensure patients remain in the POD to be monitored for the minimum allotment of time necessary depending on the medication provided.

2. Ensure that persons assigned to the Exit Monitor position understand their duties.

Activity 7: Demobilize

Observation: Strength – *POD Demobilization capabilities*

References: Not Applicable

Analysis: The demobilization process for the CDPHE POD was efficient, timely, and organized. Once the CDPHE POD exercise ended at 1:00 pm, the CDPHE POD was immediately demobilized. CDPHE POD staff broke down the CDPHE POD, and POD materials and supplies were reconstituted for use during a future event. A CDPHE POD staff debriefing and exercise Hotwash was conducted approximately one-half hour after the CDPHE POD closed. The transition to normal Immunization Program duties and functions was quick and well organized.

Recommendations: None

Capability 1: Mass Prophylaxis- November 17, 2007 29 Point-of-Dispensing Sites Statewide

Capability Summary:

Mass Prophylaxis is the capability to protect the health of the population through the administration of critical interventions in response to a public health emergency in order to prevent the development of disease among those who are exposed or are potentially exposed to public health threats. This capability includes the provision of appropriate follow-up and monitoring of adverse events, as well as risk communication messages to address the concerns of the public. Appropriate drug prophylaxis and vaccination strategies are implemented in a timely manner upon the onset of an event to prevent the development of disease in exposed individuals. Public information strategies include recommendations on specific actions individuals can take to protect their family, friends, and themselves.

On November 17, 2007, 29 POD sites opened throughout the state of Colorado. Each of these POD sites conducted mass prophylaxis operations by providing seasonal influenza vaccine to the public. These POD sites were evaluated using the HSEEP Mass Prophylaxis Exercise Evaluation Guide, which tested direct mass prophylaxis tactical operations, conducting triaging procedures, mass dispensing, and POD demobilization. The intended outcome is to ensure that critical medications (vaccinations and/or antibiotics) are disseminated to the general public in a safe and time-efficient manner.

Activity 1: Direct Mass Prophylaxis Tactical Operations

Observation 1.1: Strength – *Adaptable POD staff*

References: Not Applicable

Analysis: Eleven out of the 29 POD sites commented that their POD staff was able to adjust to real-time changes in operations. Multiple POD sites reported that staff flexibility and willingness to change plans at a moment's notice positively impacted their efforts to run a smooth and effective POD. Multiple PODs benefited from flexible and adaptable staff that was able to successfully deviate from POD plans and/or protocols when needed. During an emergency, response efforts will not always go as planned and emergency responders must be flexible and adaptable to possible changes in the tasks they are assigned. Teamwork and maintaining a level of flexibility will allow PODs to be effective and efficient. Plans provide a solid foundation from which to function and initiate response actions, however, when changes occur, it will be beneficial to have flexible staff willing to change plans and to modify their response to the situation as necessary.

Recommendations:

1. LPHAs are encouraged to emphasize the need to be flexible and adaptable to changes during POD operations. LPHAs are encouraged to build strong relationships with, and provide frequent training to, pre-identified POD staff and volunteers prior to real or simulated emergency events.

Observation 1.2: Area of Improvement – *External Communications*

References: LPHA POD Plans and local pertinent Memorandums of Agreement (MOA) and/or Understanding (MOU)

Analysis: The most highly recorded area for improvement by multiple PODs was external communications. Over 14 POD sites commented that different components of external communications were lacking. Some of the key comments about this area of improvement from some of the local POD sites included:

- “Communication and/or the lack thereof presented major problems between this POD and CDPHE... Many everyday or normal features other cell phone users enjoy are not available in this area”
- “The Area Command Center established for the exercise has some difficulties in communicating with PODs outside of the immediate area. [Certain] PODs were difficult to reach because of poor cell phone reception. There was a lack of redundancy with standard communication equipment such as fax and computer (email)”

Issues stemming from external communications came from a variety of sources, as is seen in the above comments. Noted issues include: POD site infrastructure capabilities and

communication method viability (e.g. cell phone signals, radio problems, a POD site that could not support communication devices/impeded upon message delivery, etc).

Many of the issues encountered by the LPHAs in their PODs stem from limitations the POD site itself. Many POD sites utilized on November 17 did not have the infrastructure in place to enable communication devices to function in the POD. For example, some PODs did not have a landline phone, cell phone coverage, or towers for 800 MHz radio communications. Some POD sites had problems accessing communication devices (such as faxes, landline telephones, etc) because only certain areas of the POD site were open and available to POD staff during the exercise. In some instances, the LPHA had a memorandum of agreement with a local school – but access to the school offices was not included in the agreement.

Some regions chose to test an Area Command approach for *POD Squad*. For some All-Hazards Regions, Area Command was a positive experience, while for others, more practice is recommended. CDPHE encourages all LPHAs to continue to test external communications methods to determine what methods will work best for the county, the region and for the state, and to implement these methods during future exercises and events.

It is important to note that external communications has been an area for improvement in multiple exercises over the past several years. Each year, CDPHE and LPHAs take steps to improve those gaps in external communication plans. A continued united effort to test external communications will continue to be a focus in exercises that CDPHE and LPHAs conduct in the future.

Recommendations:

1. LPHAs should reevaluate and modify their current POD site plans and MOUs/MOAs to ensure that an adequate communication infrastructure is intact and available during POD operations. All POD sites will need to have access to a landline phone as well as at least one other reliable external communication device.
2. Communication Plans and Protocols need to be clearly established and continuously exercised to ensure familiarity and to troubleshoot other potential communication gaps.

Activity 2: Activate Mass Prophylaxis

Observation 2.1: Area of Improvement - Security

References: Local Public Health Agency POD Plans, under: “V. Roles and Responsibilities – Part D: Security”

Analysis: Many POD sites noted that POD security is in need of improvement. LPHAs were provided a POD Plan template in 2006 to help standardize POD plan content requirements statewide. These POD plans include a specific section to address the security component of POD operations. Security encompasses a variety of factors, including: internal security, external security, vaccine/medication security, crowd control, and badging and credentialing POD staff and volunteers. According to exercise feedback, security

implementation varied at the 29 POD sites during the exercise. Five POD sites noted that very little security existed at their sites or that more security would be beneficial during future events. However, three POD sites commented that security was successful at their POD site. Those POD sites that had adequate security also reported having strong relationships and open communication with the local law enforcement partners in their community both during the exercise and through relationship building weeks, months and years prior to *POD Squad*.

Recommendations:

1. Local Public Health Agencies need to make necessary modifications to their *POD Plans* to reflect stronger POD site security plans including:
 - a. External Security (perimeter and crowd control)
 - b. Internal Security
 - c. Vaccine (asset/resource) Security
 - d. Proper credentialing methods or checks for all POD staff

2. LPHAs are encouraged to solicit the assistance of security and/or law enforcement partners in their community to help develop and/or revise the security protocols and procedures of their *POD Plans*.

Observation 2.2: Strength - *External communications with local communities*

References: Local Public Health Agency Emergency Preparedness Scope of Work 2007-2008 Task List: *Deliverable(s) 1.7, Regional Planner Tasks 8 and 9, and Regional Trainer Task 5.*

Analysis: Multiple POD sites felt that external agency and community partner collaboration strengthened the overall success of their POD(s) during *POD Squad*. Ten POD sites observed that the multi-agency response throughout the POD exercise was very impressive and that the agencies present were well trained in their specific roles.

Many LPHAs were able to promote community involvement and interest in *POD Squad* by providing information about the exercise to their local communities weeks in advance of *POD Squad*. LPHAs utilized radio, television, and newspaper advertisements to inform their local jurisdictions about *POD Squad*. This high level of advertisement and publicity allowed for many PODs to increase participation and community buy-in for the exercise.

Although much of the public information and community outreach conducted prior to this exercise was artificial in nature, there are many actions that LPHAs can take ahead of time to help foster community involvement. Exercises such as *POD Squad*, are just one an example of how LPHAs can involve their local communities in emergency preparedness and response efforts.

Recommendations:

1. LPHAs are encouraged to continue community and external agency involvement (as

exercise participants, volunteers, etc) with exercises and other emergency preparedness activities in the future.

Observation 2.3: Area of Improvement – ICS Forms

References: Local Public Health Agency Emergency Preparedness Scope of Work 2007-2008 Task List: *Deliverable(s) 1.2, Regional Planner Task P3, Regional Trainer Task T4.*

Analysis: Some POD sites experienced confusion and difficulty with the implementation and utilization of the Incident Command System (ICS) structure and ICS forms.

Over 10 separate POD sites encountered difficulty and/or confusion with the implementation of the ICS structure and subsequent ICS forms. The integration and implementation of ICS has been included as a deliverable in LPHA contracts for over 4 years. LPHAs have been tasked to train, exercise and implement the ICS structure and ICS forms during exercises, drills, and events.

Several POD sites encountered multiple issues related to ICS implementation, organization, and the utilization of pertinent ICS forms (for example, for the Volunteer check-in/check-out sheet #211). Some of those comments included:

- “POD staff were not assigned to monitor or fill out ICS forms properly”
- “POD staff need better understanding and execution of the ICS chain-of-command structure”
- “Although Incident Command was imitated and an Incident Action Plan was provided to personnel, it was not followed by the Command and General ICS staff”
- “Formal check-in and check-out procedures were lacking. No one was formally assigned to overseeing this process. This created substantial confusion as volunteers and POD staff reported the site for duty”
- “Operational period briefing procedures need to be followed”
- “ICS process (forms, JAS, ICS positions) need to be clarified and specific JAS are needed, clear identification of personnel and ICS positions, and ICS forms need to be fully completed”

It should be noted that although some PODs had difficulty with the implementation of the ICS structure, other PODs found the implementation and organization of the ICS structure to be successful during *POD Squad*.

Recommendations:

1. LPHAs should continue to train and exercise on ICS components (forms, organization, chain-of-command, etc) so that a strong ICS foundation is established with all LPHA personnel who may be involved in the response to a public health emergency.

Observation 2.4: Area of Improvement - POD signage

References: Local Public Health Agency POD Plans, under: “F. POD Facility Set Up”

Analysis: Some PODs noted during POD Squad that their POD lacked adequate signage inside and outside of their POD sites.

- “ Proper signage for the public to identify/understand the layout of the POD was needed ...additionally, even though the school’s address was advertised to the public, direction signs located on the street where people had to turn off of the main road would have guided them, and perhaps drawn in more of the public for vaccinations”
- “Site signage needed work. Specifically, outdoor signage was not immediately put up so arriving patients did not know where the entrance was. Also signage labeling the station tables was not initially provided. This was later established and improved the flow. Volunteer parking/volunteer entrance signage was needed as well”
- “There was inadequate signage on the streets leading to the POD Site” and “Signage: needed more visible directional signs”

Recommendation:

1. LPHAs are encouraged to have signs readily available to be set up in a POD for an emergency event. These signs may include directional signs, common known pictograms, etc. LPHAs are also encouraged to have sign making materials in their POD set-up cache in case a sign needs to be made in the midst of an emergency response.

Observation 2.5: Strength – Volunteer and Staff Assessment tool (VSAT)

References: The Volunteer and Staff Assessment tool (VSAT) developed by the Colorado Department of Human Services – Division of Mental Health

Analysis: In June 2007, the Colorado Department of Health and Human Service’s Division of Mental Health (DMH) put together a draft Volunteer and Staff Assessment Tool (VSAT) for use after an event or during shift changes. The VSAT was disseminated to all 29 POD sites prior to *POD Squad* and was filled out by local POD staff. Eleven POD sites were able to send back the VSAT assessment to the DMH for analysis. The assessment tool looked at data such as the event’s impact on staff stress levels, training and experience, and coping styles. The VSAT was designed as if this were a real event and the information gathered will help DMH plan for potential staff support needs during future incidents. The assessment consisted of a series of checkboxes - a few of the VSAT questions and POD staff responses obtained during *POD Squad* are listed below:

- Question #6: This is my first disaster response
(37% of those who sent back the VSAT survey checked this box)
- Question #11: I felt well trained and prepared for responding to this event

(72% of those who sent back the VSAT survey checked this box)

- Question #13: I knew who to report to and understood what was expected of me
(81% of those who sent back the VSAT survey checked this box)

The VSAT is just one of many possible examples of how partner agencies, such as DMH, can assist and positively impact emergency response efforts at the local level.

Recommendation: None

Activity 5: Conduct Mass Dispensing

Observation: Strength – *Internal Communications*

References: Not Applicable

Analysis: Over 10 POD sites noted that internal communications was a strength during the exercise. Many PODs assigned runners to go between different POD stations to help spread information, PODs had radios available for internal communications, and staff understood and followed proper chain-of-command protocols.

Two regions established an Area Command structure where PODs within a given All-Hazards Region would report to a regional EOC to communicate site-specific issues and to provide numerical data for the POD, or other necessary communications. Strong internal communications allow for the transmission of necessary information quickly and effectively within the POD and to other external sources as well.

Recommendations: None

Activity 6: Adverse Events Monitoring

Observation: Area of Improvement – *Patient monitoring after receiving vaccine*

References: Applicable LPHA Vaccination protocols/guidance documents

Analysis: It was noted that during the November 17th portion of the exercise that patient adverse event monitoring was an area needing improvement. One POD succinctly commented about this area needing improvement:

“Although there was a designated holding area in the POD for observation of people after they were vaccinated, and before they exited, some people just bypassed this step. There needed to be better information provided by the Exit Information Team, informing people that they would have to take a seat in the holding area for a brief time to ensure that they did not suffer from any adverse reaction to the vaccine. The Exit Monitoring Team was not forceful enough to ensure that people sat in the holding area for observation for the prescribed time before allowing them to exit. Part of this problem can be attributed to the familiarity people have with receiving a seasonal influenza vaccination. The monitoring step

will be much more critical in a {*real*} pandemic influenza event”

Adverse event monitoring is an important element in POD operations. It should be noted that POD patients were informed of the possibility of adverse events at the patient information stations. No patients reported experiencing adverse reactions to the vaccine during the POD Squad exercise.

Recommendation:

1. Establish and/or modify adverse event monitoring guidelines in local LPHA vaccination protocols/guidance for monitoring all patients provided with any type of vaccine during an emergency event from a local POD site – patients should be monitored for an appropriate period of time based on the vaccine provided.

**** *Please Note:* The strengths and areas of improvement highlighted in this portion of this AAR are not inclusive of every POD site that opened on November 17, 2007. Specific POD information is documented in the local public health agency *POD Squad* After Action Report for the county and/or counties of interest.**

Capability 2: Medical Supplies Management and Distribution

Capability Summary: Medical Supplies Management and Distribution is the capability to procure and maintain pharmaceuticals and medical materials prior to an incident and to transport, distribute, and track these materials during an incident. The intended outcome is to ensure that critical medical supplies and equipment is appropriately secured, managed, distributed, and restocked in a timeframe appropriate to the incident.

On November 16, 2007, CDPHE set up a small Receipt, Stage and Store (RSS) Warehouse Operation to test the transport of 3,400 doses of vaccine to the San Luis Valley, Southeast, and South Central Regions as well as to two counties in the North Central Region. These regions set up their own Regional Transfer Point (RTP) Warehouse Operations to test receipt of the vaccine from the RSS and distribution of vaccine to participating counties in the region that would be using the vaccine during POD Operations on the following day, November 17th.

Activity 1: Direct Medical Supplies Management and Distribution Tactical

Observation: Area for Improvement – *Inventory Tracking and Tactical Communications*

References: Colorado SNS Plan 2005-2007: Tab F Inventory Control
Colorado SNS Plan 2005-2007: Tab P Tactical Communications

Analysis: CDPHE EPRD intended on testing the RSS Inventory Tracking System (RITS), during this exercise. RITS training was provided to CDPHE staff in August 2007; however, system limitations have led the Colorado Strategic National Stockpile (SNS) Coordinator to seek an alternative to the RITS inventory tracking system. As a result, CDPHE needs to re-evaluate what inventory tracking system/process will be used at the state level in the event

that Colorado requests the SNS. Colorado is currently looking into the use of HCStandard.

Radio and cell phone communications worked well with all drivers and RSS personnel. Although the communications equipment worked well, some gaps in communications did exist. For example, while the vaccine was in transport from the RSS site to Buckley Air Force Base, the Captain at Buckley expected the courier company drivers to arrive at a different gate than had previously been communicated. The drivers were not informed of this gate change until after they arrived at original gate on base (although the gate may have been changed intentionally by Buckley personnel for security purposes).

A second communications gap occurred when the courier company driver did not notify the South Central (SC) RTP that the vaccine was within 10 minutes of arrival. RSS staff informed the South Central RTP that the driver would notify RTP staff via cell phone or email when the vaccine was approximately 10 minutes from arrival at the warehouse. This call was not made and the driver just showed up at the warehouse to unload the delivery.

Recommendations:

1. CDPHE must re-evaluate what inventory tracking system will be used for SNS assets and train users on how to use the system.
2. Ensure that RSS Warehouse staff bring extra 800 MHz radios to the warehouse site to provide to transportation vendors that do not have cell phones or that may be traveling through areas of the state with unreliable cell coverage or service.
3. Reinforce the importance of continued communications and verification of information during response activities to all public health and external partners.

Activity 2: Activate Medical Supplies Management and Distribution

Observation: Area for Improvement – *RSS staff briefing and communications*

References: Colorado SNS Plan 2005-2007: Tab D RSS Warehouse Operations
Colorado SNS Plan 2005-2007: Tab H Transportation and Distribution

Analysis: Pre-identified RSS staff members were provided with their first exercise inject on the afternoon of November 15 using the CDPHE Dialogics system. RSS staff members were provided with a summary of the current exercise scenario and were asked to report to the DOC Training Room for badging and further instructions. RSS staff arrived at the DOC at the designated time and were badged and provided with a briefing. On the morning of November 16, RSS staff arrived at the RSS site to set up equipment and begin RSS operations. An ICS organization chart and positions were established prior to the event; however, RSS staff were not provided with an initial briefing upon arrival at the warehouse. Pre-developed job action sheets were also not provided to the five RSS staff members on scene. In a real event, the identification and assignment of RSS team members would have happened in the DOC with the SNS Coordinator and Incident Commander. In addition, the SNS Coordinator would oversee all SNS activities, including oversight of the RSS Warehouse Manager and other RSS staff assigned.

Communication with the RSS, RTP and DOC sites worked well once it was established. The RSS backed up communications over cell phone and radio with an email, which was beneficial. Also, it was helpful that RSS staff provided other communication methods (phone and fax numbers) by radio.

At one point during the exercise, RSS staff asked the SNS Coordinator if it was their role to be in communication with the RTP staff. RSS staff need to be more familiar with the SNS plan. During the Hotwash, the South Central RTP stated that there was too much time wasted communicating with the RSS as the RSS would ask for clarification from the SNS Coordinator in the CDPHE DOC, CDPHE DOC would then respond to the RSS in order for the RSS to provide the information back to the RTP. As communications occurred via 800 MHz radio, RTPs could hear the communications between the RSS and the CDPHE DOC and would prefer to communicate with the SNS Coordinator directly. Communication should flow between DOC and RSS on a secured channel, and communication between RTP should be directly to DOC on another secured channel.

The RSS Warehouse was staffed and operational prior to the delivery of the vaccine. As this operation was small, the staffing provided to the RSS was sufficient for meeting warehouse needs. Material handling equipment was available in the SNS trailer and was sufficient for this type of response; however, most RSS staff did not know what was stored in the trailer or how to use this equipment.

Many of the RSS activities were simulated and too artificial to properly evaluate during this exercise. In this particular scenario, it is likely that the RSS site used for the exercise would not be the location selected during a real event due to the fact that this site is also a medical supply warehouse. In a pandemic event, the day-to-day warehouse operations at this site would be significantly affected and it is unlikely that this space would be available to support SNS operations. Based on event analysis, a different site would have been chosen and notification to warehouse management would have taken place.

The RSS staff had to take an EPRD staff member's laptop to the RSS Warehouse, as the designated SNS laptops do not have wireless broadband card installed nor were broadband cards themselves available. Without broadband cards, the laptops did not have internet access at the RSS Warehouse.

Recommendations:

1. SNS Coordinator and/or RSS Warehouse Manager should provide staff briefings and current copies of RSS job action sheets (JAS) that include descriptions of roles, duties, and responsibilities for each position to all RSS personnel in future exercises/events.
2. Ensure that all EPRD staff are familiar with the SNS Plan once it is revised based on this exercise and other changes occurring as a result of the program's change in leadership. Additional training should be provided for RSS Warehouse functions and responsibilities as appropriate.
3. Re-evaluate RSS communication plan and train staff on the plan to ensure that

communication between the CDPHE DOC and the RSS is on a secured channel, and communication from RTPs is routed directly to the CDPHE DOC on another secured channel. expectations for how RTPs will communicate with CDPHE and to ensure RSS Warehouse staff communicate effectively with CDPHE SNS Coordinator in the CDPHE DOC.

4. Train more people on the type of equipment and materials stored in the SNS trailer and how to set up and use this equipment in the event that the RSS needs to be set up for a real event.
5. Load Internet broadband software onto all SNS laptops and have at least one broadband card available for use at the SNS Warehouse.
6. Store more box cutters in the SNS trailer.

Activity 3: Establish Security

Observation: Strength – *Badging*

References: Colorado SNS Plan 2005-2007: Tab L Security

Analysis: All RSS personnel were provided with badges and all staff present at the RSS site had identification. Tri-County Health Department staff arrived to drop-off and pick-up the vaccine and brought a member of the Arapahoe County Sheriff's Office, however, designated security personnel (such as law enforcement) were not present at the RSS site for the duration of the exercise. Also, there was no formal check-in/check-out process used at the RSS site during the exercise.

Recommendations:

1. Ensure security personnel are present at RSS site, scaled to the size of the operation.
2. Follow a standardized check-in/check-out procedure to insure all relevant information is provided to incoming staff (such as using the checklist provided in the RSS Just-In-Time training notebook) and all staff are accounted for, regardless of the size of the operation.

Activity 4: Warehouse Operations and Distribution

Observation: Area for Improvement – *Forms*

References: Colorado SNS Plan 2005-2007: Tab F Inventory Control

Analysis: The ground transport drivers were briefed on their responsibilities and were provided with the chain-of-custody forms for each of the three regions. The appropriate vehicles were identified and vehicle identification information was communicated to staff at Buckley Air Force Base and to the South Central Regional Transfer Point.

After the exercise it was discovered that the transportation vendors took a copy of the chain-of-custody and other forms for their own records although they were not told to do so. This

created confusion once the shipment reached the RTP sites. The chain of custody forms did not contain enough copies for all of the parties that handled the vaccine during transport. There was only one chain of custody copy left by time it got to the RTP, which meant that the RTP couldn't give out copies to the PODs. In addition, all three RTP sites and the Tri-County team that picked up the vaccine directly from the RSS reported that the coolers did not contain a packing slip. This made it difficult for RTP staff to determine how much vaccine was delivered and how much of the vaccine was affected by the loss in temperature during transport.

The empty cardboard boxes that represented additional medical supplies and pharmaceuticals for delivery to the Southeast RTP were initially left behind in the RSS Warehouse. The Express Messenger truck had to return to the RSS Warehouse to collect the boxes and head back out to Buckley Air Force Base.

The CDPHE Regional Request for SNS Assets Form was used correctly, however, state and local staff found the form confusing and difficult to use. The form was pre-developed prior to the exercise and faxed directly to the three RTP sites and the CDPHE SNS Branch in the DOC. Local agencies then reported to CDPHE to confirm receipt of the Request for SNS Assets Form within 30 minutes. The complicated forms took too long to fill out and this created a bottleneck in quickly processing the vaccine deliveries. The form needs to be revised and staff need to be trained in how to use the form.

The boxes and the coolers full of vaccine were not labeled properly, and the forms that were provided were confusing. No lot numbers were provided (preventing the RTP from tracking the vaccine once it was provided to the PODs throughout the region) and vaccine information was not included. However, it is important to note that the Southeast RTP reported that they did not have difficulties with the forms as they had contingency plans in place to deal with some of the issues that occurred during this portion of the exercise.

The vaccine was pre-packaged in coolers on November 15th to ensure that the vaccine remained adequately refrigerated during transport. Although refrigeration initially seemed sufficient at the RSS Warehouse, it was later shown to be deficient – some of the vaccine transported to all three regions became too cold as the temperature of the vaccine fell one or more degrees below the acceptable range for an extended period of time and the vaccine had to be discarded. (*Please see Capability 1: Mass Vaccination*) Information received from Colorado's SNS Project Officer, indicates that after extensive vaccine transport testing they found that air transport via helicopter would not affect vaccine temperature, as most transport would be via pressurized jet (no temperature change) or via helicopter (doesn't reach high enough altitude to pose risk of temperature change). CDC/DSNS also indicated that in a real event, CDC/DSNS would provide no packing/re-packing guidance for vaccine transport, as well as no supplies for refrigeration (i.e. cold packs, thermometers, coolers etc.).

One major strength was identified in how well CDPHE staff worked together to get more vaccine to the RTP sites that needed it once it was discovered that the vaccine was compromised during transport.

Transport Time from:

RSS to South Central RTP = 1 hour, 20 minutes

RSS to Elbert County = 1 hour, 22 minutes

RSS to Southeast RTP = 1 hour

RSS to San Luis Valley RTP = 1 hour, 20 minutes

Recommendations:

1. Ensure RSS staff follow the designated quality assurance procedure to ensure that no materials are left behind prior to and during the process of loading delivery vehicles.
2. All deliveries should include a correct packing slip that contains all relevant information on the supplies and pharmaceuticals included in the shipment.
3. Redesign the packing slips, 'Regional Request for SNS Assets Form' and the chain of custody forms and train state and local staff how to properly use these forms. Additionally, a process needs to be in place to ensure that there are multiple copies of forms available for transportation vendor(s), RSS, RTP and POD staff.
4. Request that the Southeast Region provide information on their contingency planning to determine why things ran more smoothly at the Southeast RTP and not at the other locations. This information will be shared and will serve as guidance to other RTP sites throughout the state.
5. CDPHE will ensure that protocols be revised to address the issue of inventory integrity. Specifically for assets that require temperature control, process will be put into place that allows for constant reassessment at shorter time intervals in order to mitigate the potential loss of vaccine due to an increase in temperature.

Activity 5: *This activity was not tested during this exercise.*

Activity 6: Demobilize

Observation: Area for Improvement – Demobilizing RSS

References: Colorado SNS Plan 2005-2007: Tab D RSS Warehouse Operations

Analysis: Once the vaccine was shipped out to the three RTPs, activities at the RSS were reduced. The CDPHE DOC was short staffed, but the SNS Coordinator did not initially ask RSS staff to leave the warehouse facility to be reassigned to positions in the DOC. When the SNS Coordinator did request that staff return to the CDPHE DOC, the RSS Warehouse Manager stated that all staff were going to remain at the RSS site for several more hours until all RTP staff verified receipt of the vaccine. RSS staff began to demobilize equipment prior to the request by the SNS Coordinator and did not follow instructions to return to the CDPHE DOC despite the fact that RTP communications were by cell phone and radio, which did not require staff to remain at the RSS facility.

Recommendations:

1. RSS site should be staffed appropriately based on the needs of the event. If RSS

activities are minimal, extra staff should be reassigned to the CDPHE DOC immediately.

2. RSS Warehouse Manager should follow all requests made by SNS Coordinator.
3. The RSS organization chart should reflect that SNS Coordinator is the lead for all SNS activities.
4. RSS Manager and SNS Coordinator should communicate about how the RSS staff and equipment will be demobilized prior to any demobilization activities taking place.

Note: Regional Transfer Point Observations

Information was also collected from the three Regional Transfer Point (RTP) locations. This information identifies similar strengths and areas for improvement as those identified for the RSS. Strengths during the RTP operations include RTP security, area command and staff flexibility. RTP areas for improvement were identified, including communication with transportation providers (traveling from the RSS to the RTP), tracking supply requests, activation of staff in proper roles and deviations from using procedures already in place in the SNS plan. Please note that this summary of RTP activities and observations is not inclusive of every RTP operation that took place on November 16, 2007.

For additional information on RTP operations, please review the applicable regional After Action Reports created by the Southeast Region, San Luis Valley Region and/or the South Central Region.

Capability 3: Emergency Operations Center Management

Capability Summary:

Emergency Operations Center (EOC) management is the capability to provide multi-agency coordination (MAC) for incident management by activating and operating an EOC for a pre-planned or no-notice event. EOC management includes: EOC activation, notification, staffing, and deactivation; management, direction, control, and coordination of response and recovery activities, coordination of efforts among neighboring governments at each level and among local, regional, State and Federal EOCs; coordination of public information and warning; and maintenance of the information and communication necessary for coordinating response and recovery activities. Similar entities may include the National (or Regional) Response Coordination Center (NRCC), Joint Field Offices, National Operating Center, Joint Operations Center, Multiagency Coordination Center, Initial Operating Facility, etc. The intended outcome is to ensure that the event is effectively managed through multi-agency coordination for a pre-planned or no-notice event.

The CDPHE Department Operations Center (DOC) was activated on November 16 and 17, 2007. On November 16, Incident Command was initiated and staff was assigned at a minimal level. A Public Information Officer (PIO), a Strategic National Stockpile (SNS) Coordinator and Regional Liaison positions were assigned and these positions spent the majority of the day responding to vaccine packaging and temperature issues. The SNS Coordinator remained in contact with the RTP Managers until these issues were resolved. In mid-afternoon, a member from the CDPHE Immunization Program reported to the DOC for a brief period of time.

On November 17, twenty-three CDPHE Emergency Preparedness and Response Division (EPRD) personnel reported to the DOC and were in their assigned positions by 7:45a.m. The DOC was fully operational by 8:00 a.m. and demobilization was completed by 12:45 p.m.

Activity 1: Activate DOC

Observation: Strength – *Activation of EPRD staff*

References: CDPHE DOC Operations Manual

Analysis:

The CDPHE Department Operations Center (DOC) was activated on November 16 and 17 during the *POD Squad* exercise. Using redundant communications methods via Dialogics, such as e-mail, cell phone, and landline phone, EPRD staff members were notified to report to the DOC on both days. It took 17 minutes for staff to acknowledge receipt of the Health Alert Network (HAN) notification on Friday, November 16. On Saturday, November 17th, the HAN notification was sent at 6:25a.m. Within 17 minutes EPRD staff acknowledged receipt and reported to the DOC in approximately one hour from the notification. Upon arrival, all staff members were required to check-in, show their ID badges, and wear personnel protective equipment, which was issued at the check-in station. Staff were not provided with vests or job action sheets upon check-in and were not provided with the DOC packets that provide helpful information about how to use DOC equipment, commonly used policies and procedures, etc.

Recommendations:

1. Provide vests, job action sheets and packets to incoming staff during the first briefing and during each staff change thereafter. This should be added as a task in the Incident Commander checklist.

Activity 2: Direct DOC Tactical Operations

Observation 2.1: Strength – *Locating and redirecting vaccine after vaccine compromise*

References: State Strategic National Stockpile Base Plan

Analysis:

On November 16, when the South Central RTP Manager called to inform CDPHE that the vaccine had arrived at a temperature below the acceptable range, the SNS Coordinator was extremely adept at handling the problem. Even as the situation escalated and the Southeast and San Luis Valley RTP Managers also reported the same problem, the SNS Coordinator stayed focused and worked closely with both the RTP Managers and the CDPHE Immunization Program to determine the appropriate course of action. Local public health partners were extremely quick and efficient in trouble shooting and finding additional vaccine for both their own PODs as well neighboring regions. They responded

professionally, quickly and efficiently.

Recommendations: None

Observation 2.2: Strength – *External Communications with SEOC and PODs*

References: Not Applicable

Analysis: Maintaining communication during an incident is always challenging and on November 17th, CDPHE DOC staff worked hard to provide information to both internal and external exercise participants. Briefings took place in the DOC on an hourly basis and included the Emergency Support Function (ESF) # 8 representatives at the State Emergency Operations Center. Communication was tested between the DOC and the State EOC; however, there were some delays due to technical glitches with the phones and computers at the State EOC. The Regional Liaison positions began contacting the PODs at approximately 8:00 a.m. and continued to call their county contacts on an hourly basis for situation updates, such as getting data on the current amount of vaccine administered to the public.

The Logistics Section Chief posted information to WebEOC on both days. The Planning Section compiled an Incident Action Plan for each day and developed the situation report after each briefing. The situation reports and Incident Action Plans (IAPs) were posted to COHAN. This information was also posted as an attachment to WebEOC. One area of consideration is that only four staff members in the EPRD know how to use the WebEOC program, one of which is already assigned to the SNS Coordinator Position.

Four Regional Liaisons reported to the Liaison Officer. Each Regional Liaison position was responsible for maintaining contact with two assigned all-hazards regions. The DOC Regional Liaison position was created one year ago to serve as a CDPHE point-of-contact for local public health partners during an incident. This position is responsible for responding to requests for assistance and providing technical assistance to our local public health partners. On November 17, the Regional Liaisons were tasked with obtaining hourly situation updates from the PODs on how much vaccine was administered to the public. This information was tracked on a spreadsheet created by the Liaison Officer and provided to the SNS Coordinator and the CDPHE Public Information Officer. Some local PODs found the one-hour briefings to be too frequent. During an incident, the Regional Liaison positions need to gauge how often they should be in contact with LPHA staff, as once per hour may be too frequent for some.

At 9:40 a.m., the Coors Field POD contacted the CDPHE DOC for additional medical supplies, such as band-aids, syringes, etc. There was some confusion as to where these supplies might be found, but nonetheless, the SNS Coordinator was able to locate the resources with the help of local partners and communicated this information back to the Coors Field POD Manager.

The 800 MHz radios were used during the exercise; however, traffic was not always kept to a

minimum. At times, some messages did not contain information that was relevant to the exercise nor was proper radio etiquette used.

The Amateur Radio Emergency Service (ARES) also participated in the exercise and set up a mobile station in the CDPHE parking lot. This allowed local public health partners to test their ARES capabilities and provided a redundant mode of communication.

Recommendations:

1. EPRD should arrange for the Colorado Division of Emergency Management to provide a WebEOC training to all EPRD staff. This training should occur well in advance of the Democratic National Convention so that EPRD staff members have time to practice using the WebEOC system before this large event. In addition to this training, CDPHE should identify at least two more individuals to become proficient, frequent users of WebEOC.
2. EPRD should continue building a working relationship with the Amateur Radio Emergency Service (ARES) by inviting them to play in other exercises or drills. CDPHE should invite the ARES coordinator to give a brief presentation during one of the Monday Morning Muster Meetings.
3. Modify the Regional Liaison job action sheet to reflect lessons learned during this exercise. Include the reminder/action item that Liaisons ask their partners how they are organized for the current event/how they prefer communication be channeled. This will ensure that those jurisdictions under an area command maintain their organizational structure.
4. Provide a brief reminder to EPRD staff on proper radio usage and etiquette. A reminder should also be communicated at the beginning of an exercise/event to all partners.

Activity 3: Gather and Provide Information

Observation: Area of Improvement – *Information collection*

References: DOC Standard Operating Procedures, Section containing ICS Forms and Position Booklets stored in the DOC.

Analysis: On the afternoon of November 14, the Incident Commander assigned an EPRD staff person as the point of contact for local health department information collection. The EPRD sent an email out to LPHAs requesting that all LPHAs either directly send EPRD information on whether or not they would be setting up a POD on November 17th via email or to update this information in COHAN. LPHAs sent a variety of information; much of it was not related to the exercise, PODs, or influenza clinics at all. Information was not provided in the way that CDPHE needed it. This demonstrates that CDPHE may not get critical information in an event as quickly as needed or in the format requested. When collecting real-time information in the future, CDPHE needs to be very clear on what information is needed and in what format. CDPHE should provide templates, instructions, and deadlines when collecting any information from LPHAs.

HAN updates were sent to LPHAs, however, there was some confusion during the exercise as the HAN messages were often unclear and not all LPHA staff participating in the exercise were on the CDPHE HAN distribution list.

On November 17th, the Planning Section worked diligently to collect information and populate the ICS-201 and 202 Forms. Members of the Planning Section indicated it was difficult typing information into the ICS-201 Briefing Situation Report (Modified for CDPHE) because it was formatted in Excel, and sentences tended to get cut off. There was also some confusion on how much detail to include in the Incident Action Plan. The completed documents were saved to a folder on COHAN, but not to the K:\Drive as is indicated in the Position Booklets. In addition, the position folders were not distributed either on November 16 or 17. These booklets contain information on where the ICS forms are stored and where to save them once completed. The booklets also contain easy instructions on how to set up and operate the workstations and would have been a useful tool during the exercise.

DOC leadership did not follow the communications protocols as they are currently written in the state SNS plan for information exchange between the CDPHE DOC and the POD sites. Rather than working through a third party at an EOC or at an RTP, CDPHE contacted designated personnel at the POD directly throughout the exercise. The current SNS communication protocols should be re-evaluated. Communication protocols related to information exchange between the CDPHE DOC and county-level staff should be reviewed and rewritten if needed.

Recommendations:

1. CDPHE should convert ICS ICS-201 Briefing Situation Report (modified for CDPHE) from Excel to Word.
2. CDPHE should ensure that someone in the DOC is assigned to distributing the position booklets and providing just-in-time training, as necessary. This task should be added to the Incident Commander's job action sheet.
3. CDPHE should include an example of a completed ICS-201 and 202 in the Planning Section Chief's Position Booklet.
4. CDPHE should schedule training and drills, which allow staff to practice completing the ICS-201 Incident Briefing and 202 Incident Objectives forms.
5. CDPHE should have an ICS Forms Shortcut on the DOC desktops so that the forms are more accessible.
6. CDPHE needs to develop and test a common system for collecting information from LPHAs. EPRD staff needs to be very specific about what type of information is to be submitted/collected from LPHAs. This data reporting system should be exercised before August 2008.
7. HAN backups should participate in message development drills to ensure that future messages are clear and easy to understand.
8. LPHAs should continue to maintain and update necessary contact information in the HAN/Dialogics system.

Activity 4: *This activity was not tested during this exercise.*

Activity 5: *This activity was not tested during this exercise.*

Activity 6: Provide DOC Connectivity

Observation: Area of Improvement – *DOC Equipment Technical Support*

References: DOC Standard Operating Procedures Manual

Analysis: When the DOC was activated on November 16, the two individuals most proficient in operating the DOC equipment were offsite working at the Receipt, Stage and Storage (RSS) Warehouse. All of the equipment was in good operating condition, however, when problems occurred, DOC exercise participants were not always able to resolve the problems without additional technical support.

Recommendations:

1. EPRD to identify additional individuals who will have access to and thorough knowledge of the DOC facility and equipment to support multiple operational periods and the size of the incident.
2. EPRD should train all EPRD staff in troubleshooting and resolving some of the most common problems that might occur with the DOC workstation equipment, particularly with the laptops. A couple of issues to address: dealing with unwanted websites popping up, where to find the printer cartridges, and how to change them.
3. EPRD should implement more drills so staff can practice using the DOC equipment.

Activity 7: Support and Coordinate Response

Observation: Strength – *Guidance to DOC staff during the exercise*

References: Not Applicable

Analysis:

On November 16 the EPRD Emergency Response Coordinator served as an “ICS Coach” to the staff in the DOC. This individual helped those working in the DOC to understand and apply ICS concepts. For example, if there were questions on what information to capture in the Incident Action Plan or which ICS position should complete a particular task, the ICS Coach was there to provide guidance. New and existing EPRD personnel seemed to benefit from the expertise this position provided.

Recommendations: None

Activity 8: Demobilize DOC Management

Observation: Strength – *Demobilizing the DOC*

References: DOC Standard Operating Procedures Manual

Analysis: Deactivation took place in an orderly fashion at 12:30 p.m. on Saturday, November 17. Laptops, phones, radio, and other supplies and equipment was put away and the last briefing was provided around 11:45 a.m. If this were a real event, demobilization would occur in a tiered fashion, rather than all at once.

Recommendations: None

Capability 4: Emergency Public Information and Warning

Capability Summary: The Emergency Public Information and Warning capability includes public information, alert/warning and notification. It involves developing, coordinating, and disseminating information to the public, coordinating officials, and incident management and responders across all jurisdictions and disciplines effectively under all hazard conditions. The intended outcome is for government agencies and public and private sectors to receive and transmit coordinated, prompt, useful, and reliable information regarding threats to their health, safety, and property, through clear, consistent information-delivery systems. This information is updated regularly and outlines protective measures that can be taken by individuals and their communities.

All local public health agencies (LPHAs) were aware of this exercise in advance and were also notified that CDPHE would be providing information to the media in advance of this exercise to solicit participation from the public. All media messages created before the exercise (including an initial press release that was sent to the media on Tuesday, November 13, 2007) were shared with LPHA regional staff and PIOs for their approval before being sent to the media.

A statewide media campaign initiated by CDPHE EPRD in July 2007 known as, “What If? Colorado”, provided media coverage prior to the exercise. Thirty-second televised spots were produced and aired on select stations in the Denver, Colorado Springs and Grand Junction television markets. Printed advertisement templates were created and posted on the Colorado Health Alert Network (COHAN) website for LPHAs to use in local newspapers. Spanish radio spots were produced and aired on Spanish radio stations throughout the state. The “What If? Colorado” team also provided assistance in marketing the exercise to journalists throughout the state and nationally, including reporters from the Denver Post and Rocky Mountain News, KOA radio, and the Associated Press.

The Director of the CDPHE Office of Communications was involved in selecting the specific communications objectives to be tested during this exercise from the original HSEEP Emergency Public Information and Warning Exercise Evaluation Guide (EEG). This EEG was then provided to LPHAs to inform them of the objectives that the CDPHE Office of Communications would be

tested on and to enable LPHAs to test similar objectives for local PIOs during the exercise if they wished to do so.

Activity 1: *This activity was not tested during this exercise.*

Activity 2: Activate Emergency Public Information, Alert/Warning, and Notification Plans

Observation: Area for Improvement

References: CDPHE Joint Information Center Standard Operating Procedures: IV.
Concept Of Operations

Analysis:

The CDPHE Director of Communications was assigned as CDPHE's Public Information Officer (PIO) and was activated on Wednesday, November 14, 2007. The PIO called upon another agency PIO to assist with this response. The Incident Commander asked that a Joint Information System (JIS) be set up and that a central number (303-691-7484) be used by LPHAs to contact CDPHE's PIO.

The Chief Medical Officer and the Emergency Preparedness and Response Division Director were identified as the technical experts for this response. The CDPHE PIO and Deputy PIO filled the key public information positions needed during the exercise.

Private sector agencies were not notified or mobilized to support JIS operations; however, this was due to the nature and restrictions of this exercise.

The CDPHE PIO sent an email to LPHAs asking them to participate in a PIO conference call on November 16, 2007 at 11:00 am. The Deputy CDPHE PIO and LPHA PIO staff members were provided with current exercise information during this call. The purpose of the call was to notify and integrate LPHA PIO staff into the JIS and inform PIOs how public information would be coordinated during the exercise. LPHAs were informed that all messages needed to be coordinated through Mark (i.e. the JIS). The CDPHE PIO provided call participants with his cell phone number, email and DOC phone number where either the CDPHE PIO or Deputy CDPHE PIO could be reached throughout the duration of the exercise.

At the beginning of the call, the PIO asked agencies to identify themselves. PIOs were not asked to identify themselves by name, but by agency. This caused confusion later when some agencies reported that their PIO was not made aware of this call, although someone from the agency was present during the call (perhaps a regional staff member or other member of the agency that received the HAN message with the dial in information). Several agencies did not call in to the conference call either because they never received the dial in information (the CDPHE Office of Communications does not have a comprehensive phone or email contact list for LPHA PIOs and was not able to send this information to LPHA PIOs directly).

Some agencies did not receive the messages either because the person(s) working during the exercise were not on the HAN distribution list or because staff did not have access to email at the selected POD site. The HAN messages were also confusing at times and need to be written more clearly during future events. Not all POCs/Regional Staff received exercise information during all of the 3-day exercise portions. Faxes were not effective/efficient. Neither was email when people didn't have access or know which email was being used.

The 2006 Squawk Talk Improvement Plan supported the coordination and convening of Public Information Officers statewide. Over the last year, the PIOs have not met as a coordinated group. To ensure that local PIOs receive assistance and do not create conflicting messages during a large-scale public health event, the CDPHE Office of Communications should start meeting with LPHA PIOs to address issues related to public information and communications for multiple public health programs, including emergency preparedness.

Recommendations:

1. The CDPHE Director of Communications should share his list of other PIOs within the department that can assist during large-scale events with EPRD staff.
2. During an event, information from the Office of Communications and the Department Operations Center (DOC) should be provided to LPHAs in multiple formats – email, posting on COHAN, conference calls, etc.
3. If conference calls are scheduled, minutes need to be recorded and made available for people who are not able to participate in the call.
4. The CDPHE Office of Communications should develop relationships with all LPHA PIOs (and other designated communications staff) by conducting regular meetings (conference calls and/or in person) to provide technical assistance to local PIO staff.
5. The Office of Communications should be provided with the current Groupwide PIO contact list and should take on responsibility for updating and maintaining this list as needed.

Activity 3: Establish Joint Information System

Observation: Area for Improvement – *Maintaining communications throughout the duration of JIS activation*

References: CDPHE Joint Information Center Standard Operating Procedures: IV. Concept Of Operations and CDPHE Joint Information Center Standard Operating Procedures: Appendix A- Division of Responsibilities

Analysis: CDPHE established a Joint Information System (JIS) at 09:25 on November 16, 2007 during the second DOC briefing conducted by the CDPHE Incident Commander. The CDPHE PIO sent out an initial press release to the media to promote participation in the exercise on Tuesday, November 13. To provide consistent information and to address rumor control, the CDPHE PIO sent out a second press release on the morning of November 17.

During the exercise on November 17, an inject was sent to the JIS stating that the Governor's Office was concerned that inconsistent information and rumors were leaking out about the pandemic. The CDPHE PIO provided the following statement in writing: "The incident command center at CDPHE is the hub of all accurate communications – other state agencies should be taking their lead from the Joint Information System established by the CDPHE PIO. CDPHE's PIO can continue to provide e-mail and voice mail updates to the Governor's press office."

A few LPHA PIOs stated that they did not receive any communication directly from the JIS and/or CDPHE's PIO during the exercise play. They would have liked to have received periodic updates from the JIS about media inquiries, press releases, recommended messages to send to local media and other updates about how to conduct public information and risk communication efforts during the exercise. Information was transmitted one way – from CDPHE to LPHAs without any request for information from LPHAs to CDPHE related to communications. Only one LPHA directly contacted the CDPHE PIO during the exercise to request that information be changed on the website to state that their county had run out of vaccine.

Pre-developed messages from the CDPHE JIS were not provided to LPHAs on the day of the exercise, however, this may have been due to the limited duration of the exercise play. With the exception of the PIO conference call, no other communications were sent directly to LPHA PIOs other than by HAN, and many PIOs are not on the HAN distribution list.

CDPHE JIS staff did coordinate press releases, press conferences and messages with the media very successfully, however, these messages were not shared with LPHA staff until after the message was finalized and forwarded to the media.

Forty-six percent of JIS participants thought that emergency public information was coordinated and consistent across agencies and organizations. Seventy-three percent of JIS participants thought notifications were communicated to appropriate individuals and groups according to their agency risk communications plan.

Recommendations:

1. CDPHE Office of Communications should conduct quarterly drills with LPHA PIOs to practice message coordination, approvals and to establish methods of quick communication that may be used during an emergency.
2. Add all LPHA PIO contacts to CDPHE HAN distribution list.

Activity 4: *This activity was not tested during this exercise.*

Activity 5: Conduct Media Relations

Observation: Strength – *Ensuring the media was informed before/during the exercise*

References: CDPHE Joint Information Center Standard Operating Procedures: Appendix E- Job Action Sheets; Chief Public Information Officer

Analysis: The CDPHE PIO sent out a preliminary press release on Tuesday, November 13, scheduled a press conference for 9:30 am at the CDPHE DOC on Saturday, November 17 and sent out a second press release at the end of the exercise at 12:30 pm on November 17 to summarize the exercise.

On November 16, CDPHE received information from Denver stating that a group of protestors would be picketing at the Denver POD site on the following day during the exercise. The CDPHE JIS team coordinated information on the Denver protestors successfully and were able to provide relevant information on the safety and efficacy of the seasonal influenza vaccine to the media in a timely manner. CDPHE sent status reports to the Colorado Division of Emergency Management (CDEM) PIO, but this information was not provided to LPHA PIOs. The CDPHE JIS team also arranged for a radio interview on KOA to encourage people to visit Denver's POD, however, this interview was not coordinated with Denver's PIOs.

A few LPHAs expressed concern that CDPHE was providing too much information to the media and that too many people would show up at their POD site. As this was an objective of the exercise (testing mass influx of patients at the POD at the same time, simulating what would occur in a real emergency), CDPHE continued to provide information to the media. After this exercise, a few LPHAs stated that CDPHE did not provide enough information to the media, resulting in a low turn out at their PODs. Those LPHAs that were proactive and supportive about attracting media attention and promoting the exercise to community members were the most successful in getting POD participation on November 17. LPHA staff members need to take responsibility for conducting local media outreach in addition to providing input to CDPHE about how to best solicit community support during public health events.

During the exercise on November 17, the CDEM PIO was informed that Larimer County had received several inquires from the public about getting free influenza vaccinations. Larimer County Public Health did not open a POD for the exercise and was not providing free influenza vaccinations. The CDEM PIO drafted and sent out a press release to the media stating that Larimer County was not participating in the exercise and was not giving out free flu vaccine. The CDPHE JIS was prompted to coordinate this information with CDEM and Larimer County directly. This demonstrates that despite the messages released that this was an exercise occurring at select locations throughout the state (counties and locations were provided), members of the public may continue to seek out services from their local health department even if the services are not being provided in that county.

Mesa County received similar inquires from the public asking why Mesa County Public Health was not providing free flu vaccinations during the exercise. This is a good example of how local public health agencies need to anticipate requests or expectations by the public to be provided with medication, supplies or other services that they may not need depending on

the event. If an exercise or real event required that only a specific population receive prophylaxis (such as in a bioterror event or if vaccine was only available to first responders or immuno-compromised individuals), CDPHE and LPHAs would need to create messages to inform the public that medication would not be available to everyone and provide reasons as to why they would not be receiving the medication at the select POD sites throughout the state.

CDPHE must work with LPHAs to define state vs. local public information responsibilities. CDPHE cannot create a separate message for each of the 55 LPHAs. It is more likely that a broad statement will be provided to media outlets and LPHAs will need to provide specifics as to how this information applies to the residents in their communities.

During the exercise on November 17, the CDPHE PIO was informed that all major media markets in the state wanted to know how the public would be kept informed of POD locations, hours of operation, and self-screening criteria. The CDPHE PIO responded to this inject by providing the following response in writing: “The public can find all POD locations on the ‘What if? Colorado website and the CDPHE website. The CDPHE communications officer could issue media advisories if new locations are open. Dr. Calonge also is doing a TV interview at 9:30am to provide updated information to the public. Local media should continue to work with local public health agencies for information about local PODs”. It is important to note that the SIMCELL had to correct the initial talking points for press conference prior to the interview.

In addition to getting information from the “What If? Colorado” website, and press releases provided to local media, the general public also called the Colorado Health Emergency Line for the Public (COHELP). COHELP staff received 61 calls, of which 52 were handled during the exercise. Ninety percent of the calls occurred from 9:00 AM – 11:00 AM on Saturday, November 17. This indicates that if prompted, the public will call COHELP if they have questions. The El Paso County PIO also sent a request to COHELP during the exercise to provide a specific message to any El Paso County residents that called in.

Recommendations:

1. Conduct JIS drills to enable the IC, PIO and other JIS members to practice developing, approving and checking facts prior to finalizing talking points and/or press releases.
2. CDPHE must work with LPHAs to understand state vs. local responsibility for conducting media outreach and the importance of taking a proactive role in public information.
3. CDPHE to develop a better way to communicate with external JIS partners in order to collect data and share situational updates.
4. CDPHE to inform LPHA PIOs of when information is provided to the media (including a summary of the information and the media source the information is provided to). CDPHE media relations may impact LPHA efforts when dealing with similar media inquires.

Activity 6: *This activity was not tested during this exercise.*

Activity 7: Demobilize Emergency Public Information and Warning

Observation: Area for Improvement – *Ending JIS operations*

References: CDPHE Joint Information Center Standard Operating Procedures: VI. Deactivation

Analysis: The CDPHE PIO did not send out a message to LPHAs or the media stating that JIS was demobilized. The CDPHE PIO did create a post-exercise press release that was sent to media contacts after the End-Exercise inject was sent out at 12:30pm.

Recommendations:

1. At the end of an exercise or real event, document the demobilization of the DOC and/or the JIS and provide information to LPHA and media contacts in writing about who to contact with additional questions related to the event. This documentation should include contact information for how to reach the person(s) identified after the JIS is disbanded.

SECTION 4: CONCLUSION

Many plans, policies and procedures were tested, and many lessons were learned, during the 2007 *POD Squad* exercise. Moving forward in 2008, CDPHE will use the data from this exercise to further refine public health emergency preparedness and response plans, policies and procedures and create new and revised training based upon the recommendations in the exercise Improvement Plan (IP) to further enhance mass vaccination capabilities and partnerships in the event of an influenza pandemic or other wide-spread public health emergency in the state of Colorado.

State, regional and local exercise objectives were achieved at a variety of levels; however, as with any exercise, areas for improvement were identified and corrective actions have been planned accordingly. Recommendations and subsequent actions will be implemented prior to the next grant year to ensure that areas for improvement are addressed.

Future exercises will be planned to test the specific improvements and recommendations identified as a result of the 2007 *POD Squad* statewide, full-scale exercise.

APPENDIX A: IMPROVEMENT PLAN

This Improvement Plan (IP) has been developed specifically for the Colorado Department of Public Health and Environment as a result of the *POD Squad* Full-Scale Mass Vaccination Exercise conducted on November 15-17, 2007. These recommendations draw on both the After Action Report and the After Action Conference.

Capability	Observation Title	Recommendation	Corrective Action Description	Capability Element	Primary Responsible Agency	Agency POC	Start Date	Completion Date
Mass Prophylaxis- CDPHE	Activity 1: Direct Mass Prophylaxis Tactical Operations	No Recommendations for Improvement						
	Activity 2: Activate Mass Prophylaxis	EPRD to provide current copies of POD job action sheets (JAS) to the CDPHE Immunization Program, stressing the need for all POD staffed positions to be provided a JAS during future events	Provide current copies of POD job action sheets to the CDPHE Immunization Program	Planning	CDPHE EPRD	CDPHE Regional Planning Coordinator	January 14, 2008	January 30, 2008
	Activity 3: Conduct Triage for Symptoms	The CDPHE Immunization Program will develop a “sign-off” sheet to accompany the current Triage guidance. Once Triage staff have read and understood the necessary information, they will sign off on this document to indicate they understand their duties and will adhere to recommended triaging guidance.	Develop a sign-off sheet to be included with the “ <i>Epidemiological and Prevention of Vaccine-preventable Diseases</i> ” document to have Triage staff sign off on once they’ve read triaging material.	Planning	CDPHE Immunization Program	CDPHE Immunization Program	January 14, 2008	April 4, 2008

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	Activity 4: Conduct Medical Screening	No Recommendations for Improvement						
	Activity 5: Conduct Mass Dispensing	Include in the CDPHE POD JAS and CDPHE POD Organizational Chart the "line floater" position.	Develop a Job Action Sheet and org chart that includes the "Line Floater" position.	Planning	CDPHE Immunization Program and EPRD Planning Section	CDPHE Immunization Program and CDPHE Regional Planning Coordinator	January 14, 2008	May 2, 2008
	Activity 6: Adverse Events Monitoring	It should be specified on the Exit team Job Action Sheet that adverse events monitoring would be one of the responsibilities of this position.	Modify the "Exit POD" Job Action Sheet to reflect specifications for adverse events monitoring.	Planning	CDPHE Immunization Program and EPRD Planning Section	CDPHE Immunization Program and CDPHE Regional Planning Coordinator	January 14, 2008	May 2, 2008
	Activity 7: Demobilize	No Recommendations for Improvement						

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Capability	Observation Title	Recommendation	Corrective Action Description	Capability Element	Primary Responsible Agency	Agency POC	Start Date	Completion Date
Mass Prophylaxis- Local Public Health Agency	Activity 2.1: Activate Mass Prophylaxis	Modify and update current LPHA POD plans and POD Site MOUs/MOAs to reflect POD sites that have accessible communication infrastructures intact. For communication purposes, POD sites need at a minimum: 1. Landline telephone 2. At least one other reliable external communication device at the POD site.	LPHAs will work with local community facilities to establish MOUs / MOAs with POD sites that have accessible communication infrastructures, including landlines and at least one other reliable communication source	Planning	LPHA	LPHA and CDPHE Regional Planning Coordinator	January 14, 2008	June 1, 2008 <i>(per the LPHA Scope of Work 2007-2008 Deliverable 1.11)</i>
		LPHA POD Plans need to be modified and/or updated to reflect POD site external / tactical communication capabilities.	LPHAS will update their POD Plans (<i>specifically Section B. Communications and Notification</i>) to reflect changes in POD site communications infrastructure e.g. "POD Site has 'x' number of accessible landlines – other external communication methods include 'y' and 'z'" .	Planning	LPHA	LPHA and CDPHE Regional Planning Coordinator	January 14, 2008	June 1, 2008

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	Activity 2.2: Activate Mass Prophylaxis - Security	LPHAs need to modify <i>POD Plans</i> to reflect increased security measures to be taken at the POD site, including at a minimum: a. External Security b. Internal Security c. Vaccine (asset/resource) d. Proper credentialing methods or checks for all POD staff	LPHAs solicit assistance from local security and/or law enforcement partners in their community to help develop and/or revise the security protocols and procedures in LPHA POD Plans.	Planning	LPHA	LPHA and CDPHE Regional Planning Coordinator	January 14, 2008	June 1, 2008 <i>(per the LPHA Scope of Work 2007-2008 Deliverable 1.11)</i>
	Activity 2.4: Activate Mass Prophylaxis – ICS Forms	LPHAs need to train staff on and conduct exercises that incorporate ICS components, such as: 1. ICS forms 2. Organizational structure 3. Chain-of-command structure	Incorporate and exercise multiple ICS components during LPHA emergency preparedness exercises (<i>exercises may be drill, tabletop, functional, full scale</i>)	Training	LPHA	LPHA and CDPHE Regional Training Coordinator	January 14, 2008	August 8, 2008 <i>(and ongoing)</i>
	Activity 2.5: Activate Mass Prophylaxis – POD Signage	LPHAs need to have signs readily available for their PODs for an emergency event. These “sign caches” may be divided up into two groups, for example: 1. Pre-developed “standard” POD 2. Basic sign-making materials to produce signage unique to each POD as necessary	LPHAs will put signs and sign-making materials into their POD set-up kits. Materials to make signs can include: 1. Poster board 2. Tape 3. Large thick markers	Planning and Logistics	LPHA	LPHA and CDPHE Regional Planning Coordinator	January 14, 2008	June 1, 2008

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	Activity 3: Conduct Triage for Symptoms	No Recommendations for Improvement						
	Activity 4: Conduct Medical Screening	No Recommendations for Improvement						
	Activity 5: Conduct Mass Dispensing	No Recommendations for Improvement						
	Activity 6: Adverse Events Monitoring	<p>Establish and/or modify adverse event monitoring guidelines in local LPHA vaccination protocols/guidance.</p> <p>Guidance should include, at a minimum, steps to monitor all patients provided with any type of vaccine and steps to be taken if an adverse event occurs</p>	<p>LPHAs, in coordination with LPHA immunization program or other applicable vaccination partner(s), will develop / update guidelines for Adverse Events monitoring and response to include at a minimum:</p> <p>1. How LPHA will monitor for adverse events and,</p> <p>2. Actions to be taken if an adverse event occurs</p>	Planning	LPHA	LPHA and CDPHE Regional Planning Coordinator	January 14, 2008	August 8, 2008
	Activity 7: Demobilization	No Recommendations for Improvement						

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Capability	Observation Title	Recommendation	Corrective Action Description	Capability Element	Primary Responsible Agency	Agency POC	Start Date	Completion Date
Medical Supply Management and Distribution	Activity 1: Direct Medical Supplies Management and Distribution Tactical	CDPHE must re-evaluate what inventory tracking system will be used for SNS assets and train users on how to use the system.	Determine if HCStandard can support SNS inventory tracking. If not, select new system/process for SNS inventory tracking.	Systems/ Equipment	CDPHE	SNS Coordinator	January 14, 2008	2009
			Populate SNS data into inventory tracking system as system is developed and as data is made available	Systems/ Equipment	CDPHE	SNS Coordinator	2009	Ongoing
			Once system is identified and functional, train appropriate users on how to use the system	Training	CDPHE	SNS Coordinator Training Staff	2009	Ongoing
			Exercise new inventory tracking system in small drills once users are trained	Training	CDPHE	SNS Coordinator Training Staff	2009	Ongoing
			Ensure that RSS staff bring extra 800 MHz radios to the warehouse site to provide to transportation vendors that do not have cell phones or that may be traveling through areas of the state with unreliable cell coverage or service.	Ensure that CDPHE EPRD staff are informed of where to find the currently existing RSS equipment checklist that includes items to be transferred from CDPHE to the RSS warehouse in an event (such as additional 800 MHz radios)	Training	CDPHE	Training Staff	January 14, 2008

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			Put just in time training materials, including small laminated cards for 800 MHz radios in SNS trailer to provide to transportation vendors	Training	CDPHE	SNS Trainer	January 14, 2008	May 31, 2008
			Include just in time training materials, including small laminated cards for 800 MHz radios in red RSS JIT training notebook. Include information on radio etiquette in this JIT materials	Training	CDPHE	SNS Trainer	January 14, 2008	May 31, 2008
	Activity 2: Activate Medical Supplies Management and Distribution	Provide staff briefing and job action sheets	Provide training to all staff about location and purpose of red RSS JIT notebook	Training	CDPHE	SNS Trainer	January 14, 2008	August 8, 2008
All staff need to be more familiar with the SNS Plan as it is revised		Update RSS portion of the state SNS plan	Planning	CDPHE	SNS Coordinator	January 14, 2008	August 8, 2008	
		Provide additional training on RSS warehouse functions and responsibilities to all EPRD staff as appropriate.	Training	CDPHE	SNS Trainer	August 8, 2008	October 31, 2008	

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		Develop way for CDPHE DOC to directly communicate with RTPs rather than having to communicate through a third party at the RSS.	Evaluate SNS communications plan to streamline and modify communication protocols as needed between CDPHE DOC, RSS and RTP locations	Planning	CDPHE	SNS Coordinator	January 14, 2008	April 30, 2008
		Train more people on the equipment/materials stored in the SNS trailer and how to set up and use this resource.	Train more people on the equipment/materials stored in the SNS trailer and how to set up and use this resource.	Training	CDPHE	SNS Trainer	January 14, 2008	May 31, 2008
		Load Internet aircards onto all SNS computers/laptops	Load Internet aircards onto all SNS computers/ laptops	Systems/ Equipment	CDPHE	Tactical Ops Coordinator	January 14, 2008	August 8, 2008
		Store more box cutters in the SNS trailer	Purchase 2 additional box cutters	Equipment	CDPHE	Administrative	January 14, 2008	February 29, 2008
			Store new box cutters in SNS trailer	Equipment	CDPHE	Administrative	January 14, 2008	March 30, 2008

	Activity 3: Establish Security	Ensure security personnel is present at RSS site	As a courtesy, contact security partners during all future SNS exercises and drills to ask for participation (as applicable)	Training	CDPHE	SNS Coordinator Exercise Design Team	January 14, 2008	Ongoing
		Standardized check-in procedure to be followed at RSS	Use the checklist provided in the red RSS just-in-time training notebook).	Training	CDPHE	SNS Trainer	January 14, 2008	August 8, 2008

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	Activity 4: Warehouse Operations and Distribution	RSS staff to follow the quality assurance procedure to ensure that no materials are left behind prior to and during the process of loading delivery vehicles.	Review and update quality assurance procedure, job action sheets and add to checklist in red notebook	Planning	CDPHE	SNS Coordinator	January 14, 2008	May 31, 2008
			Provide training on quality assurance procedure	Training	CDPHE	SNS Trainer	January 14, 2008	June 30, 2008
		Re-evaluate and/or redesign the RSS packing slips and the chain of custody forms and train staff how to properly use these forms. Chain-of-custody forms should provide multiple copies and should include directions for who gets a copy, when and for what reason a copy is needed	Re-evaluate and redesign the RSS packing slips as necessary	Planning	CDPHE	SNS Coordinator	June 30, 2008	May 31, 2008
			Re-evaluate and redesign chain of custody form as necessary	Planning	CDPHE	SNS Coordinator	June 30, 2008	January 30, 2009
		Reevaluate Regional Request for SNS Assets process and forms	Reevaluate Regional Request for SNS Assets process	Planning	CDPHE	SNS Coordinator	January 14, 2008	May 31, 2008
			Redesign Regional Request for SNS Assets form(s)	Planning	CDPHE	SNS Coordinator	May 31, 2008	January 30, 2009
		Share SER contingency planning with other RTP staff	SNS Coordinator to provide guidance to other RTP sites throughout the state as necessary	Planning	CDPHE	SNS Coordinator	March 30, 2008	August 30, 2008

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		Ensure that protocols are revised to address the issue of inventory integrity.	Evaluate guidance on vaccine temperature monitoring and modify as needed based on lessons learned from exercise and recreation of scenario to ensure that vaccine is monitored more closely during future vaccine transport	Planning	CDPHE	SNS Coordinator Immunization Program	January 14, 2008	August 30, 2008
	Activity 5	<i>This activity was not tested during this exercise.</i>						
	Activity 6: Demobilize	RSS Manager should follow all requests made by SNS Coordinator- RSS organization chart should reflect that SNS Coordinator is the lead for all SNS activities	Provide additional training to EPRD staff on RSS and CDPHE DOC roles, activation and organization chart	Planning	CDPHE	SNS Coordinator	January 14, 2008	August 30, 2008
		RSS Manager and SNS Coordinator should communicate about how the RSS staff and equipment will be demobilized prior to any demobilization activities taking place.		Exercise RSS activation, communications, staffing, and demobilization during drill	Training	CDPHE	SNS Trainer	September 2008

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Capability	Observation Title	Recommendation	Corrective Action Description	Capability Element	Primary Responsible Agency	Agency POC	Start Date	Completion Date
Emergency Operations Center Management	Activity 1: Activate DOC	Provide vests, job action sheets, just in time training and position packets to incoming staff during the first briefing and during each staff change thereafter. This should be added as a task in the IC checklist.	Revise IC Job Action Sheet to include a task that says, "Ensure all DOC staff receive the following at the beginning of the shift change: Position packets, Just-time-training on the packets and vests."	Personnel	CDPHE	Administrative	Feb. 1, 2008	Feb. 8, 2008
	Activity 2.1: Direct DOC Tactical	No recommendations for improvement						
	Activity 2.2: Direct DOC Tactical Operations - <i>Coordinate Management of DOC With Other ICS Operations</i>	CDPHE should appoint one individual per DOC IMT to become familiar with WebEOC	Appoint one individual per DOC IMT to become familiar with WebEOC	Personnel	CDPHE	ESF 8 Coordinator	March 1, 2008	May 30, 2008
		CDPHE should familiarize these individuals with WebEOC	Familiarize those designated on the DOC IMTs with WebEOC features that would be used at CDPHE	Training	CDPHE	ESF 8 Coordinator	June 2, 2008	July 31, 2008
		CDPHE should develop Standard Operating Guidelines that include etiquette for sending and receiving messages on the 800 MHz radios.	Develop Standard Operating Guidelines that include etiquette for sending and receiving messages on the 800 MHz radios.	Training	CDPHE	Tactical Communications Coordinator	January 7, 2008	Feb. 29, 2008

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		CDPHE should invite the Amateur Radio Emergency Service (ARES) to give a short presentation during one of the Morning Muster Meetings.	Arrange for the ARES state coordinator to provide an informational presentation to the EPRD staff on the ARES.	Training	CDPHE	Tactical Communications Coordinator	March 3, 2008	June 2, 2008
		CDPHE should modify the Regional Liaison job action sheet to reflect lessons learned during this exercise.	Review the Regional Liaison job action sheet and revise tasks to include lessons learned during the exercise.	Personnel	CDPHE	Administrative	Feb. 1, 2008	March 15, 2008
	Activity 3: Gather and Provide Information	If the CDPHE Department Operations Center Planning Section continues to use the ICS ICS-201 Briefing Situation Report (Modified for CDPHE), then it should be changed from Excel to Word.	Use Microsoft Word for all ICS forms so that users can directly add data.	Systems and Equipment	CDPHE	Tactical Communications Coordinator	January 8, 2008	Feb. 29, 2008
		CDPHE should schedule training and drills, which allow staff to practice completing the ICS-201 and 202 forms.	Trainings and exercises will occur between Feb. through June as part of the Incident Management System Training Process	Training	CDPHE	ESF 8 Coordinator	Feb. 2008	June 2008
		CDPHE should have an ICS Forms Shortcut on the DOC desktops so that the forms are more accessible.	Have IT place a shortcut to the ICS Forms Folder on the desktops of the DOC computers	Systems and Equipment	CDPHE	Tactical Communications Coordinator	January 15, 2008	Feb. 29, 2008
		CDPHE should develop and test a common system for collecting information from LPHAs.	Develop and test a common system for collecting information from the LPHAs during an incident.	Systems and Equipment/ Exercise/ Drill	CDPHE	EPRD Trainer	Feb. 4, 2008	August 1, 2008

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		HAN backups should participate in message development drills	Develop two drills that allow HAN backups to practice crafting messages.	Training	CDPHE	HAN Coordinator	Begin in March or April 2008	August 9, 2008
	Activity 4	This activity was not tested during this exercise.						
	Activity 5	This activity was not tested during this exercise.						
	Activity 6: Provide DOC Connectivity	CDPHE should identify additional individuals who will have access to and thorough knowledge of the DOC facility and equipment.	Have a process in place to arrange for someone from the IT team to be available as a backup if both Greg Stasinis and Greg Schlosser are not on site during the activation of the DOC.	Personnel	CDPHE	Tactical Communications Coordinator	Feb. 4, 2008	March 31, 2008
		CDPHE should implement more drills so staff can practice using the DOC equipment.	Set up a weekly schedule for pre-identified EPRD staff to open, close, and set up necessary equipment in the DOC for a Monday Morning Muster Meeting. Greg Stasinis will be available to coach and provide information.	Training	CDPHE	Tactical Communications Coordinator	March 1, 2008	August 8, 2008
	Activity 7: Support and Coordinate Response	No recommendations for improvement						
	Activity 8: Demobilize DOC Management	No recommendations for improvement						

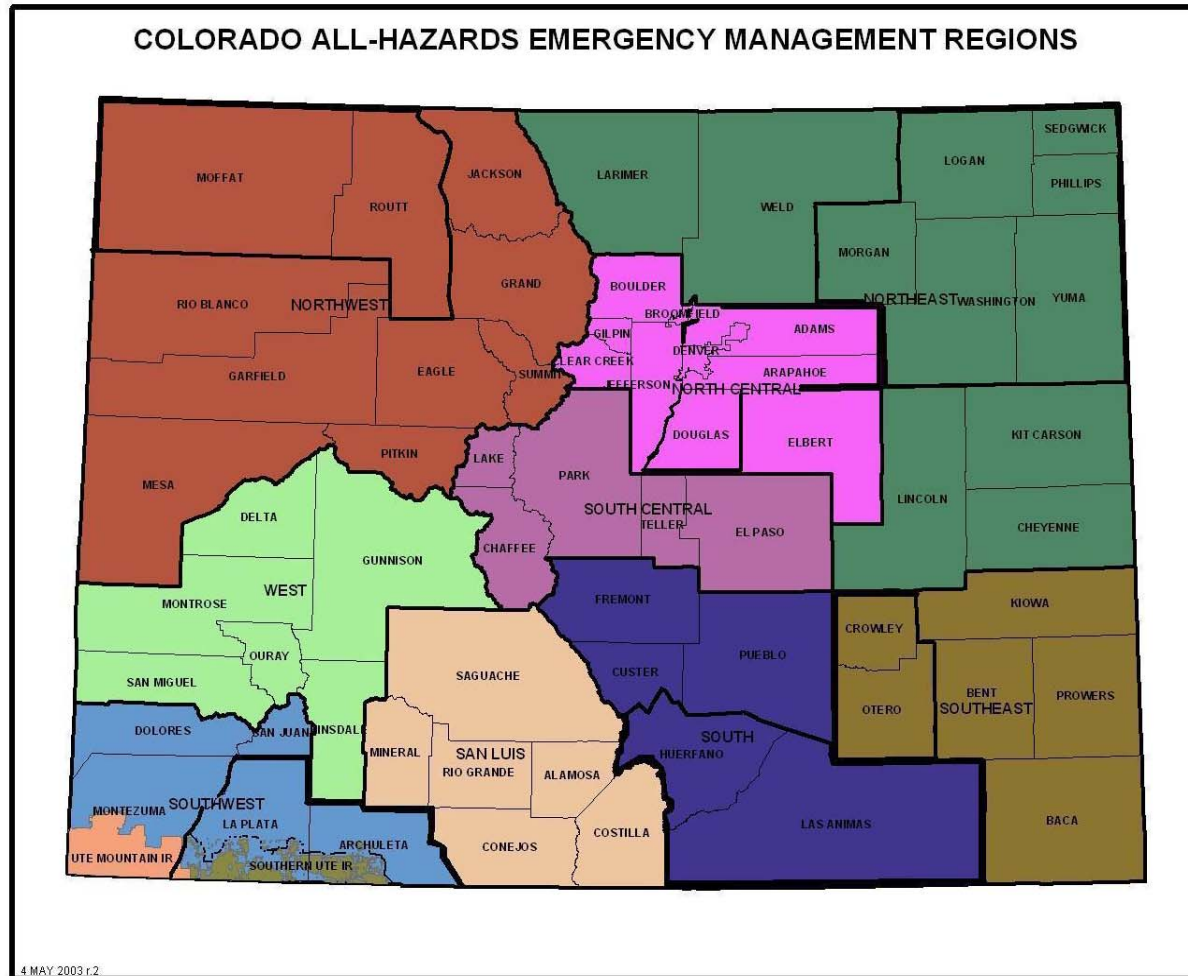
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Capability	Observation Title	Recommendation	Corrective Action Description	Capability Element	Primary Responsible Agency	Agency POC	Start Date	Completion Date
Emergency Public Information and Warning	Activity 1	This activity was not tested during this exercise.						
	Activity 2: Activate Emergency Public Information, Alert/Warning, and Notification Plans	Identify other CDPHE PIOs to assist during large-scale events.	Provide list of CDPHE PIOs that can assist during large-scale events and exercises to EPRD	Planning	CDPHE	Office of Communications	January 7, 2008	February 29, 2008
		Test providing information to LPHAs in multiple formats – email, posting on COHAN, conference calls- and practice data collection and sharing situational updates.* <i>Also meets recommendations from Activity 5</i>	Conduct a survey to collect information on the most and least effective methods are for providing information to LPHA PIOs and other PIO needs from CDPHE	Planning	CDPHE	Office of Communications EPRD Planner	February 29, 2008	August 8, 2008
		The CDPHE Office of Communications to develop stronger relationships with all LPHA PIOs (and other designated communications staff)	Transfer current Groupwise contact list from EPRD to Office of Communications – they will be owner of this tab and update this as LPHA PIO contact information changes	Planning	CDPHE	Office of Communications	January 7, 2008	February 29, 2008
			Develop a schedule and start conducting conference calls and/or quarterly in person meetings with local PIO staff	Planning	CDPHE	Office of Communications	January 7, 2008	February 29, 2008

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		Add all LPHA PIO contacts to CDPHE HAN distribution list.	Add LPHA PIO contacts to CDPHE HAN distribution list as appropriate.	Equipment/ Systems	CDPHE	HAN Coordinator	January 7, 2008	February 29, 2008
	Activity 4	This activity was not tested during this exercise.						
	Activity 5: Conduct Media Relations	CDPHE to work with LPHAs to understand state vs. local responsibility for conducting local media outreach and importance of taking proactive role in public information.	Discuss state vs. local communications responsibilities during quarterly meetings scheduled for 2008	Planning	CDPHE	Office of Communications	January 7, 2008	August 8, 2008
		CDPHE to inform LPHA PIOs of when information is provided to the media (including a summary of the information and the media source the information is provided to).	CDPHE to inform LPHA PIOs of when information is provided to the media as appropriate	Planning	CDPHE	Office of Communications	January 7, 2008	Ongoing
	Activity 6	This activity was not tested during this exercise.						
	Activity 7: Demobilize Emergency Public Information and Warning	During future exercises or real events, document the demobilization of the DOC and/or the JIS	During future drills and real events communicate time of demobilization to LPHA and media contacts in writing about who to contact with additional questions and how to contact this person(s).	Training/ Exercise	CDPHE	Office of Communications	January 7, 2008	Ongoing

APPENDIX B: COLORADO ALL-HAZARDS REGIONAL MAP



APPENDIX C: PARTICIPANT FEEDBACK SUMMARY

The following electronic participant feedback survey was created in Zoomerang (www.zoomerang.com) prior to November 15, 2007 and was distributed to exercise participants via email on November 19, 2007. The link to this electronic survey was also distributed to participants in hard copy at each of the exercise locations on November 15, 16, and 17, 2007.

Approximately 334 exercise participants from the following groups completed the survey:

65% players

18% Controllers and Evaluators

1% Observer

2% Simulation Cell

17% Other

PARTICIPANT FEEDBACK FORM

Question	Results
The exercise goals and objectives were clearly stated.	91 % Agreed or Highly Agreed
Did you receive and read a copy of the POD Squad exercise plan (EXPLAN)?	93% said Yes
If you were an Evaluator or Controller, did you receive and read a copy of the POD Squad Controller and Evaluator Handbook?	77% said Yes
The exercise materials and documentation were a valuable tool throughout the exercise.	63% Agreed or Highly Agreed
I participated in the Exercise Briefing and Controller/Evaluator Training, if applicable.	64% said Yes
The exercise briefing and or Controller/Evaluator Training on November 6 was helpful in preparing me for my role in the exercise.	64% Agreed or Highly Agreed
Did you receive frequent updates from your regional exercise point of contact as the exercise was being planned (January - November 2007)?	79% said Yes
The exercise was well structured and organized.	79% Agreed or Highly Agreed
Did you understand what was expected of you prior to actually beginning the exercise?	76 % Fully Understood or Understood
Did the exercise objectives meet the needs of the State of Colorado in respect to testing actions that you anticipate would be required in an actual emergency?	75% Agreed or Highly Agreed

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Listed below is a sampling of the most common responses to the two opened ended questions that appeared on the participant feedback survey:

Please identify the most successful aspect(s) of this exercise.

- Ability to get community to the POD sites
- Community outreach and lessons learned.
- Good learning activity to see how flow and crowd management could be done better. Volunteer cooperation and Teamwork
- Were able to vaccinate people very quickly and we were able to test the ARES communication system.
- NIMS utilized successfully.
- Organization of check- in, getting forms to patients, and set up for administering the vaccine.
- Multi agency, department, organization coordination.
- The relationships developed during this will be very helpful in any event.
- People were moved efficiently from one stage to another, no bottlenecks very little waiting. There were plenty of volunteers available to help anyone that needed it, including the handicapped.
- The process of organizing the group of people that will be partners in the event of a real emergency.
- The drive through exercise turned out to be very successful for a first time attempt at this type of clinic
- ICS practice
- Orientation with POD Command structure and lines of communication.

Please provide any recommendations on how this exercise or future exercises could be improved or enhanced.

- Why was RTP not simulated on Nov. 17? We all need to work on communication protocols. ICS practice
- I would also like to see more participation on the part of regional staff in the design phases of the exercise. Too much was simply left for "approval" on the part of regional staff.
- Name badges for all members of exercise, including volunteers would have been helpful.
- Need more people to get vaccinations to fully test the system.
- The "Designated POC's" for each region were not able to involve other regional staff as much as they would have liked.
- This exercise (as well as previous ones) still lacked a realistic test of the Joint Information System. There are a lot of questions on the local level how a statewide risk communication campaign might look during a real incident
- More public communication: more opportunities to implement communication protocols between state and locals.
- Clear, large signage directing people to the area by car and walking

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- KISS Principle (Keep It Simple Stupid). I received the ExPlan but it was too involved to read in its entirety for busy local professionals.
- A brief outline for local players would have been helpful.
- Clear definition as to how mental health fits in---with the clients or with staff members
- Better visibility of signage from the main road into the school.
- Additional immunization skills training for RN's who do not normally administer injections in their day-to-day job activities.
- It would have been nice to have an assistant to each nurse to draw up vaccine and keep things stocked at your area, that way all we would have had to do was give the vaccine and it would have went a lot faster
- If we use a flu clinic model, it needs to be held earlier in the fall for more community participation - many people had already received their flu shots.
- Ensure all health department nurses are competent at injecting, several nurses (managers) refused to vaccinate as they had not vaccinated in years, provide training to these managers improved communication between commander, section chiefs, and team leaders
- Need Bilingual forms. Having English only forms forced the need for additional bilingual staff and more time was required to complete the basic forms. Signage should have also been bilingual.
- There needs to be improvement on the temperature controls for the vaccine. Had this been a real pandemic flu it would be a shame to lose any portion of a very limited amount of vaccine due to temperature.

APPENDIX D: ACRONYMS

Acronym	Meaning
CDC	Centers for Disease Control and Prevention
CDEM	Colorado Division of Emergency Management
CDPHE	Colorado Department of Public Health and Environment
EPRD	Emergency Preparedness and Response Division
ESF	Emergency Support Function
HAN	Health Alert Network
HHS	Health and Human Services
ICS	Incident Command System
IAP	Incident Action Plan
LPHA	Local Public Health Agency
RITS	RSS Inventory Tracking System
RSS	Receipt, Stage and Store Warehouse
RTP	Regional Transfer Point Warehouse
SNS	Strategic National Stockpile
POD	Point of Dispensing
VAERS	Vaccine Adverse Events Reporting System
VIS	Vaccine Information Statement