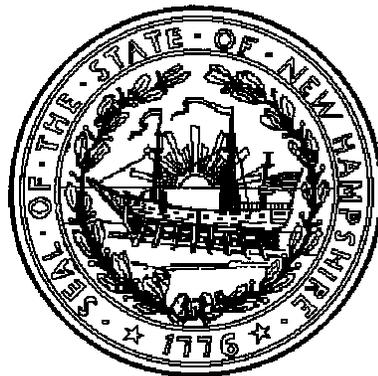


**New Hampshire Department of Safety
Department of Health and Human Services**

**Isolation and Quarantine
Tabletop Exercise**

April 16, 2009

AFTER ACTION REPORT / IMPROVEMENT PLAN



Report Date: July 2009

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ADMINISTRATIVE HANDLING INSTRUCTIONS

1. The title of this document is the *Isolation and Quarantine (I&Q) Tabletop Exercise (TTX) Action Report / Improvement Plan (AAR/IP)*.
2. This document should be safeguarded, handled, transmitted, and stored in accordance with appropriate security directives. Reproduction of this document, in whole or in part, without prior approval from the New Hampshire Department of Safety, Homeland Security and Emergency Management (HSEM), and the Department of Health and Human Services (DHHS) is prohibited.
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EXECUTIVE SUMMARY

Preparedness for public health emergencies involves a cycle of planning, training, exercising, evaluation, and improvement to develop and enhance response capacity and capabilities. Successful exercises, such as those in the New Hampshire Isolation and Quarantine (I&Q) Tabletop Exercise (TTX) provide critical information for this ongoing process; delineation and analyses of exercise results; development of recommendations or follow-up actions; and procedural or program improvements. This After Action Report (AAR) provides key information for continuing New Hampshire's efforts to achieve an enhanced level of public health preparedness and response capabilities for responding to a public health emergency and for activation and implementation of I&Q. This AAR presents and analyzes exercise issues and results, identifies strengths to be maintained and built upon, and identifies potential areas for further consideration or improvement.

The suggested actions in this AAR should be viewed as recommendations only. In some cases, New Hampshire agencies that were involved in the exercise may determine that the benefits of implementation are insufficient to outweigh the costs. In other cases, these agencies may identify alternative solutions that may be more effective or efficient. Management should review the applicable recommendations and determine the most appropriate course of action given the available resources (e.g., time, staff, funding) for implementation.

EXERCISE PLANNING

The New Hampshire I&Q TTX was designed and conducted based on Homeland Security Exercise and Evaluation Program (HSEEP) guidelines, as developed by the U.S. Department of Homeland Security (DHS). This exercise was conducted as a no-fault event.

The exercise was designed to provide an opportunity for key I&Q stakeholders to identify issues, policies, resources, strategies, and planning goals to prevent the transmission of communicable diseases to passengers on a conveyance from a person infected with a novel virus; evaluate and monitor other passengers to detect communicable disease illness-like symptoms; and prevent further transmission.

This exercise focused on specific roles of New Hampshire DHHS, the New Hampshire Department of Safety (DOS), Federal agencies, and various other agencies with transportation responsibilities during a communicable disease event. The emphasis was on coordination, integration of capabilities, problem identification, and problem resolution.

The exercise planning team was composed of members from four states and numerous diverse agencies, including representatives from the following organizations:

- New Hampshire Department of Safety
 - Homeland Security and Emergency Management
 - State Police
- New Hampshire Department of Health & Human Services

- Public Health Information
- New Hampshire Department of Transportation
- New Hampshire National Guard
- Manchester-Boston Regional Airport
- U.S. Department of Justice
 - NH Attorney Generals Office
- U.S. Department of Homeland Security
 - Immigration and Customs Enforcement
 - Customs and Border Protection
 - Coast Guard

OBJECTIVES

The exercise planning team determined objectives for the exercise, developed the exercise scenario, and organized logistics for the exercise. The objectives for the exercise focused on the response to a public health event requiring the need for I&Q. Based on the exercise planning team's deliberations, the following objectives were developed for the New Hampshire I&Q TTX:

1. Identify the roles and responsibilities of the participating agencies during an I&Q event, specifically as they impact modes of transportation.
2. Identify all existing laws, plans, policies, and procedures related to I&Q and how they can be coordinated for a more efficient response.
3. Evaluate the plans, policies, and procedures for the direction of I&Q tactical operations, specifically as they impact modes of transportation.
4. Evaluate the plans, policies, and procedures to implement travel restrictions during an isolation and quarantine event.
5. Evaluate the plans, policies, and procedures to implement *voluntary* I&Q.
6. Evaluate the plans, policies, and procedures to implement *mandatory* I&Q.
7. Evaluate the plans, policies, and procedures to issue public information and warnings during an I&Q event.

EXERCISE EVALUATION

This exercise was designed as a foundation for improving the capability and understanding of I&Q procedures for each of the participating agencies. Towards that end, the exercise focused on

supporting and enhancing open communication and a free flow of ideas between various Federal, State, and local partners.

To capture the data that was highlighted during this exercise, a combination of subject matter expert (SME) evaluators and recorders were used. Additionally, each person was asked to fill out a Participant Feedback Form indicating his or her findings from the exercise. A summary of this data can be found in Appendix C of this AAR. ***It is important to note that the exercise analyses reflect the individual views of players and evaluators. The analyses are subjective, and the recommendations are opinions that may or may not meet with the State of New Hampshire's strategies and priorities.***

MAJOR STRENGTHS

The major strengths identified during this exercise are as follows:

- Players identified decision makers for coordinating an I&Q location for a ship with possibly infectious crewmembers. (Observation 1.1, page 9)
- A coordinated transportation, first responder, and public health working group exists among Manchester-Boston Regional Airport (MHT), local public health, and emergency responders. (Observation 1.5, page 11)
- The State of New Hampshire has a method in place to provide timely dissemination of health and safety information to medical personnel. (Observation 1.1, page 19)

In addition, participants discussed that the ability exists to provide legal, logistical, and information support for a public health event requiring I&Q.

PRIMARY AREAS FOR IMPROVEMENT

Throughout the exercise, there were several opportunities for improvement in participants' abilities to respond to the scenario provided. The primary areas for improvement are as follows:

- State and Federal plans for coordinating and mobilizing public health and security personnel between State, Federal, and transportation agencies is lacking during a communicable disease outbreak. (Observation 2.1, page 13)
- The State of New Hampshire lacks specific plans for implementing travel restrictions. (Observation 3.1, page 14)
- Lines of communications and command between transportation and public health agencies are unclear. (Observation 3.3, page 15)
- Although exercise participants seemed to understand what the term *Joint Information Center (JIC)* meant, there was lack of agreement regarding when a JIC would be opened, where, by whom, and who would staff it. (Observation 3.1, page 21)

During the exercise the subject of I&Q in relation to maritime and aviation travel was discussed in detail. While issues surrounding surface travel, such as rail and motor coach, were discussed from a public health prospective the exercise lacked participation from experts from these

transportation modes. It has been recommended by players, evaluators, and the exercise planning team that the State of New Hampshire DHHS continue their efforts to include surface transportation agencies in future planning, training, and exercising.

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CHAPTER 1: EXERCISE OVERVIEW

EXERCISE DETAILS

Exercise Name

Isolation and Quarantine Tabletop Exercise

Type of Exercise

Tabletop Exercise

Exercise Date

April 16, 2009

Duration

6 hours

Location

New Hampshire Department of Safety
33 Hazen Drive
Concord, NH 03305

Sponsor

New Hampshire Department of Safety, Division of Homeland Security and Emergency Management
New Hampshire Department of Health and Human Services, Division of Public Health Services

Mission

- Response
 Recovery
 Prevention
 Other

Capabilities

- Isolation and Quarantine
- Emergency Public Information and Warning

Classification

- Unclassified
 For Official Use Only
 By Invitation Only

Scenario Type

- Chemical release or threat
- Biological release or threat (infectious agent)
- Radiological release or threat
- Nuclear detonation or threat
- Explosive detonation or threat
- Cyber
- Other / Sudden Acute Respiratory Syndrome

Exercise Planning Team

See Appendix B for a list of all exercise planning team members.

Exercise Director

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PARTICIPATING ORGANIZATIONS**Federal Agencies**

- U.S. Department of Health and Human Services
 - Centers for Disease Control and Prevention
- U.S. Department of Homeland Security
 - Customs and Border Protection
 - Immigration and Customs Enforcement
 - Transportation Security Administration
 - Coast Guard
- Federal Aviation Administration

State Agencies – New Hampshire

- New Hampshire Department of Safety
 - Homeland Security and Emergency Management
 - State Police
- New Hampshire Department of Health and Human Services
 - Office of the Commissioner
 - Public Health Information
 - Public Health Services
- New Hampshire Department of Justice
 - Attorney General’s Office
- New Hampshire Department of Transportation
- New Hampshire State Hospital
- New Hampshire Superior Court

Other Agencies

- City of Nashua Public Health
- Londonderry Police Department
- Manchester – Boston Regional Airport
 - Fire Department
- Manchester Health Department
- Portsmouth Health Department
- Portsmouth Fire Department
- Portsmouth Police Department
- Rockingham County Sheriff’s Department
- Strafford County Superior Court Center
- Southwest Airlines
- VOLPE National Transportation Center

Total Number of Participants

- Participants (approximate): 81
- Facilitators: 3
- Evaluators: 6
- Recorders: 3

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CHAPTER 2: EXERCISE DESIGN SUMMARY

The New Hampshire Isolation and Quarantine (I&Q) Tabletop Exercise (TTX) was designed to evaluate player actions against current response plans and capabilities for a public health event requiring voluntary and/or mandatory I&Q.

PURPOSE AND SCOPE

The I&Q TTX provided an opportunity for key I&Q stakeholders to identify issues, policies, resources, strategies, and planning goals to prevent the transmission of communicable diseases to passengers on a conveyance from a person infected with a novel virus; evaluate and monitor other passengers to detect communicable disease illness-like symptoms; and prevent further transmission.

This exercise focused on specific roles of the New Hampshire Department of Health and Human Services (DHHS), the New Hampshire Department of Safety (DOS), Federal agencies, and various other agencies with transportation responsibilities during a communicable disease event. The emphasis was on coordination, integration of capabilities, problem identification, and problem resolution.

Exercise Program Participants

As designed by the exercise planning team, participants were assigned the following roles, as applicable to the objectives of the exercise:

- **Players:** Players were personnel who responded to emergency situations based on their job description, experience, and knowledge. These individuals were designated as responders based on current emergency operations plans (EOPs), protocols, and procedures.
- **Facilitators:** Facilitators were involved with the discussion-based exercise and provided situation updates and moderated group discussions. They also provided additional information or answered questions, as required.
- **Recorders:** Recorders did not have an active role in the discussions, but recorded all exercise play relevant to the evaluation.
- **Evaluators:** Evaluators were chosen based on their expertise and their ability to constructively comment on exercise response activities. They had passive roles in the exercise; they only recorded player discussions and in no way interfered with exercise flow. After the exercise, evaluators completed exercise-related evaluation documents and attended a hot wash to discuss observed response actions.

ACTIVITIES, CAPABILITIES, AND OBJECTIVES

Capabilities-based planning allowed 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 capabilities listed below form the foundation for the organization of all objectives and observations in this exercise:

- Isolation and Quarantine
- Emergency Public Information and Warning

Objectives

The exercise objectives associated with the target capabilities are as follows:

1. Identify the roles and responsibilities of the participating agencies during an I&Q event, specifically as they impact modes of transportation.
2. Identify all existing laws, plans, policies, and procedures related to I&Q and how they can be coordinated for a more efficient response.
3. Evaluate the plans, policies, and procedures for the direction of I&Q tactical operations, specifically as they impact modes of transportation.
4. Evaluate the plans, policies, and procedures to implement travel restrictions during an isolation and quarantine event.
5. Evaluate the plans, policies, and procedures to implement *voluntary* I&Q.
6. Evaluate the plans, policies, and procedures to implement *mandatory* I&Q.
7. Evaluate the plans, policies, and procedures to issue public information and warnings during an I&Q event.

SCENARIO SUMMARIES

Players were guided through the scenarios using two formats, a PowerPoint briefing and a Situation Manual. The scenarios were based on and presented in three modules, with each module having a specific focus designed to allow players an opportunity to meet the exercise objectives.

Following the Homeland Security Exercise and Evaluation Program (HSEEP) model, the exercise scenarios were designed to give players the opportunity to meet all of the exercise objectives, which required the scenarios to include the following:

- A person-to-person transmissible disease
- A disease that is likely to require I&Q
- Multiple ways in which the disease could enter into the New Hampshire population
- Ability for infected people to use various means of public transportation

The scenarios were presented using three separate modules, with each module targeting a different functional group or area of responsibility.

While the people and the means of transportation were different for each scenario, the disease points of origin were all common. Each scenario involved the spread of Sudden Acute Respiratory Syndrome (SARS) originating in Venezuela. The first scenario involved Southern New Hampshire University (SNHU) students returning from spring break in Venezuela via a commercial airline. The second scenario involved a family returning from Venezuela and also returning via airline. The third scenario included two ships arriving at Portsmouth Harbor and coming from Venezuela. The level of complexity and involvement for each participating agency changed from module to module.

Following the first module the participants were divided into two functional discussion groups, maritime with public health and aviation with public health. After the module 1 discussion period the 2 groups were merged into a plenum discussion group. The plenum format was maintained through modules 2 and 3.

Module 1

Module 1 introduced participants to the following three scenarios:

1. Three SNHU students return from Venezuela via the Manchester • Boston Regional Airport and have developed symptoms consistent with the SARS case definition.
2. The Chavez family has returned from Venezuela via Manchester • Boston Regional Airport, traveled via taxi from the airport to their home in Manchester, and one member of the family is ill.
3. A ship from Venezuela has entered the Portsmouth Harbor with one person dead and several ill crew members. The Centers for Disease Control and Prevention (CDC) has requested that New Hampshire DHHS assist with screening the ship's crew.

By the end of the module presentation, the exercise participants knew that one case of SARS was confirmed in New Hampshire and that there were potentially other individuals who are infected within the State who have traveled using different conveyances.

Module 2

Module 2 involved the following key elements:

- The numbers of known and suspected cases of SARS is increasing.
- Potential contacts of SARS patients are scheduled to leave, or have left, the area via different types of conveyance.
- There is possible further exposure from the crewman of the ship in the Portsmouth Harbor.

Module 2 participant discussion focused on voluntary I&Q.

Module 3

Module 3's focus of discussion is in the area of mandatory I&Q, including enforcement and the appeals process. The key elements of Module 3 are as follows:

- Cases of SARS have increased in New Hampshire and nationwide.
- There are known and suspected cases of people violating the mandatory quarantine orders.
- People who are known to be contacts of SARS patients were attempting to use various forms of public transportation.
- Some advocacy groups are concerned that Hispanics are being unfairly targeted.

CHAPTER 3: ANALYSIS OF CAPABILITIES

This section of the report reviews the performance of the exercised capabilities, activities, and tasks. Observations are organized by capability and associated activities, taken from the U.S. Department of Homeland Security (DHS) Target Capability List (TCL). The TCL comprises 37 capabilities that address such areas as response, immediate recovery, and select prevention and protection mission areas, as well as common capabilities such as planning and communications that support all missions.

In this chapter, the capabilities linked to the New Hampshire Isolation and Quarantine (I&Q) Tabletop Exercise (TTX) objectives are listed, followed by corresponding activities, which serve as guides for identifying and prioritizing investments when working to establish a capability. In addition, each capability is followed by related observations, which include references, analyses, and recommendations.

Additionally, this exercise analysis was completed during the real-world, worldwide response to the H1N1 virus, and many of the reported strategies are applicable to the I&Q TTX and therefore reflected in the evaluation.

The analyses of capabilities that follow reflect the individual views of players and evaluators. The analyses are subjective, and the recommendations are opinions that may or may not meet the State of New Hampshire's strategies and priorities.

CAPABILITY: ISOLATION AND QUARANTINE

Capability Summary: I&Q is the capability to protect the health of the population through the use of isolation and/or quarantine measures in order to contain the spread of disease. Isolation of ill individuals may occur in homes, hospitals, designated health care facilities, or alternate facilities. Quarantine refers to the separation and restriction of movement of persons who, while not yet ill, have been exposed to an infectious agent and may become infectious. Successful implementation will require that sufficient legal, logistical, and informational support exists to maintain these measures. Most experts feel that isolation and quarantine will not stop the outbreak and that, if used, the focus will be on cases that might introduce the disease into the State or other geographic area.

Activity 1: Direct I&Q Tactical Operations

Activity Definition: In response to a need for isolation and quarantine orders, direct, manage, and coordinate isolation and quarantine operations

Observation 1.1 (Strength): *Players identified decision makers for coordinating an I&Q location for a ship carrying potentially infectious crew members.*

Reference(s): None

Analysis: Federal Partners located at the Maritime Discussion Table agreed that several agencies would coordinate the initial offshore location for the affected vessel. These agencies included the U.S. Coast Guard, the Centers for Disease Control and Prevention (CDC), and Customs and Border Protection (CBP). These agencies have existing legal authority, procedures, and inter-agency agreements to conduct this activity. Close coordination is needed between CBP and the U.S. Coast Guard regarding an identified infectious disease aboard a ship arriving from a foreign port. CBP would have to be notified of any individuals accessing the vessel for any purpose (such as providing supplies or medical services).

Recommendation(s):

1. Ensure that local public health officials are informed of existing Federal plans, policies, and procedures.

Observation 1.2 (Strength): *The Coast Guard, by formal agreement, can act as an agent for the CDC.*

Reference(s):

1. www.cdc.gov/ncidod/dq

Analysis: Due to watertight integrity; communal living; and internal heating, ventilating, and air conditioning systems, a communicable disease may rapidly claim many individuals in a ship's company. This may cause a significant humanitarian concern for merchant seamen being isolated when onboard a ship.

The Coast Guard, the CDC, and CBP have a partnership that allows the Coast Guard to act as an enforcement arm for the CDC—the protocols are in place and require minimal effort to activate. These agencies' long-standing relationship with the U.S. Public Health Service (USPHS), who provides the Coast Guard with its medical officers, is an additional benefit.

Recommendation(s):

1. The CDC should ensure that State public health agencies are aware of the Federal partnership described here, so that all State public health agencies understand what levels of assistance they can assume in their own contingency plans.

Observation 1.3 (Area for Improvement): *During a public health emergency, competing objectives may occur between commerce and public health organizations.*

Reference(s):

1. 14 United States Code (USC) 89

Analysis: Tension can be created when balancing the commercial pressures to offload a commercial ship and have it proceed upon its lawful occasions with the need to keep the ship's

company quarantined or isolated. The facilitation of commerce, along with maritime safety and law enforcement, is an important Coast Guard mission. Lay time and demurrage (the detention in port of a vessel by the ship owner, as in loading or unloading, beyond the time allowed or agreed upon) of cargo is never popular among shipping interests, and pressure to end or interrupt I&Q is likely to be an issue.

All those concerned about a commercial vessel's I&Q should be aware of the tension between legitimate trade and public safety—perspectives will differ. However, reasonable accommodations can be achieved to serve both perspectives, and the differing priorities should be expected and dealt with fairly. Ultimately, general public health and safety must prevail.

Recommendation(s):

1. Provide participating agencies with a copy of this AAR.
2. Provide commercial agencies with a copy of this AAR.
3. Plan sharing during development with State and Federal agencies.

Observation 1.4 (Area for Improvement): Currently there is no written plan in place to address those involved and/or responsible for insuring a commercial vessel in I&Q have adequate food, water, and medication.

Reference(s): None

Analysis: Whether at anchor or moored alongside, a ship in I&Q will eventually require additional water (unless the waters where the ship is located are drinkable or can be made drinkable), food, and fuel. The ship will also need to pump bilges or get sewage pumped off, as well as get garbage removed. Each of these items represents expenses that will have to be covered by some entity.

Although some shipping companies may have insurance to cover special needs during I&Q, the Coast Guard, New Hampshire, and the Portsmouth Port Director should understand all of the policies related to this type of situation. I&Q can result in extraordinary costs.

Recommendation(s):

1. Review the existing laws, plans, policies, and procedures related to who is responsible for logistical needs of the passengers and crew held in I&Q.

Observation 1.5 (Strength): A coordinated transportation, first responder, and public health working group exists among the Manchester-Boston Regional Airport (MHT), local public health, State public health, and emergency responders.

Reference(s): None

Analysis: There are existing procedures focused on current public health issues related to coordinated response, training, planning, and communication between MHT and Manchester Public Health, the Transportation Security Administration (TSA), law enforcement, Emergency Medical Services (EMS) personnel, and airlines. This initiative has had a positive impact on medical and health responses at MHT. In general, the coordination associated with MHT is good and a focus on early and consistent messaging must be maintained.

Recommendation(s): None

Observation 1.6 (Area for Improvement): *Law enforcement agencies are not routinely notified of people in I&Q.*

Reference(s): None

Analysis: Exercise participants discussed if and when local law enforcement would be notified of public health emergencies in general and specifically where people would be isolated and quarantined. DHHS presented the rationale of not routinely notifying local law enforcement which in many cases against privacy laws to notify police where people were isolated and quarantined. DHHS stressed that if it was necessary to involve law enforcement officials, then they would be briefed at that time about appropriate PPE.

The perspective of the law enforcement representatives participating in the TTX was that officers shouldn't have to rely on the "trust us" policy that DHHS representatives described during the TTX. The perspective is that facts have to be supplied to responders who may have to respond to a location where I&Q are occurring. Their response may be unrelated to the medical condition of those in I&Q; however, the threat of exposure to the first responders remains the same. Response players outside the health care profession lack the background to assess their comfort zone in dealing with these concerns.

Recommendation(s):

1. Develop a working group of public health and first responders to provide training recommendations and public health information sharing.

Observation 1.7 (Area for Improvement): *A procedure does not exist (or exercise participants are unaware of an existing procedure) that facilitates the coordination of Federal and New Hampshire State agencies concerning a crew member fatality resulting from a infectious disease.*

Reference(s): None

Analysis:

As a part of the third scenario used in the exercise, a crew member on board a ship coming from the SARS country of origin dies of symptoms consistent with SARS. The Coast Guard and CBP have a policy in place for dealing with these situations. However, exercise discussions indicated

that a protocol needs to be developed between the State of New Hampshire Office of the Medical Examiner (OME) and CBP to deal with one or more deceased crew members on board a vessel.

Recommendation(s):

1. A protocol should be developed between CBP and OME that identifies and explains the steps required to handle a situation in which one or more crewmembers die on board a vessel.

Observation 1.8 (Area for Improvement): When pertaining to infectious diseases, jurisdiction between State and Federal officials is not widely known/understood.

Reference(s): None

Analysis: The Coast Guard, CDC, New Hampshire Homeland Security and Emergency Management (HSEM), and DHHS need to work together to clarify which jurisdiction or authority is in charge when people are sick on a ship. They also need to determine the specific resources that need to be acquired and who should acquire them. For this scenario, participants discussed what Coast Guard officials should tell ship authorities to do when it was made known there were one dead and several ill crewmembers on board. Discussions indicated that ship authorities would wait for the CDC to give advice regarding who could or could not get off the vessel, while the CDC would provide direction to the Coast Guard on disposition of the ship. Early participant discussions indicated confusion regarding who would be investigating the patients, but later participants concluded that New Hampshire DHHS—specifically, the Public Health staff if the ship was coming into Portsmouth Harbor—would investigate patients. Participants also determined the necessity of a clear understanding ahead of such an event in regard to which agencies have jurisdiction for specific task and responsibilities in order to prevent valuable time from being lost and to avoid more potential cases of illness and public concern.

Recommendation(s):

1. Organize a task force consisting of State and Federal representatives from the Coast Guard, CDC Quarantine Unit, New Hampshire DHHS, and HSEM to further investigate these issues.
2. A separate plan/document should be written that outlines communication flow during a New Hampshire health emergency, of which ill or dead persons on a ship coming into or leaving Portsmouth Harbor would be a chapter/part/section.

Activity 2: Activate Isolation and Quarantine

Activity Definition: Initiate, plan, and mobilize healthcare and security personnel and resources to contain a communicable disease outbreak.

Observation 2.1 (Area for Improvement): State and Federal plans for coordinating and mobilizing public health and security personnel

between State, Federal, and transportation agencies is lacking during a communicable disease outbreak.

Reference(s): None

Analysis: There is a lack of written procedures and protocols for communications between the U.S. Coast Guard, CBP, and New Hampshire DPHS for initial notification of potential disease outbreaks and inter-agency coordination. Without official notification, resources may be duplicated or valuable time may be lost in preventing the spread of a infectious disease.

There are no formal lines of communication in coordination with CDC between New Hampshire DPHS and out-of-state or out-of-country medical providers contracted by private-sector ship owners to ensure that treatment and disease control recommendations are coordinated. It would be necessary for New Hampshire DPHS to disseminate the protocols for isolation and care-giver treatment of isolated individuals.

Recommendation(s):

1. Develop a task force hosted by TSA at MHT office consisting of representatives from all parties in a multi-modal transportation workgroup to develop coordination procedures.

Activity 3: Implement Travel Restrictions

Activity Definition: Within an identified geographic area, implement separation and restriction of movement of potentially exposed asymptomatic individuals, and isolate symptomatic individuals on a voluntary basis.

Observation 3.1 (Area for Improvement): The State of New Hampshire lacks specific plans for implementing travel restrictions.

Reference(s): None

Analysis: There needs to be a clear understanding of what restrictions can be implemented, by whom, and what benefit they would have during an infectious disease event. The State needs to strengthen its knowledge of existing Federal standards and guidance—for example, it needs to address limits on movement of airline passengers for screening following temporary quarantine of an airplane.

New Hampshire does not have a plan in place to deal with travel restrictions. At the end of the discussion, some participants suggested that there should be no restrictions. Since cars cannot be controlled, restrictions are not necessary. However, depending on the event and the situation surrounding it, there may be times when travel restrictions are necessary and helpful. While it is not possible to outline all the possibilities ahead of time, there should be some protocols defining travel restrictions. A New Hampshire plan for travel restrictions should consider restrictions affecting all forms of transportation, who is responsible for determining restriction decisions, who has the authority to enforce them, as well as identification of the types of events for which it might be useful to restrict different types of travel.

Recommendation(s):

1. A Travel Restriction Plan or appendix to an existing plan should be developed.
2. After its approval, the Travel Restriction Plan should be practiced through drills and exercises.

Observation 3.2 (Area for Improvement): Criteria other than disease control factors should be considered before implementing travel restrictions at airports.

Reference(s): None

Analysis: The spread of an infectious disease could be mitigated by restricting movement at the first sign of disease; however, the costs may greatly outweigh the benefits. The current state of the economy has proven to be a player in the release of information because some information can impact tourism and/or the general state of the economy. Obviously shutting down travel, meetings, entertainment, and/or general assembly of the public hinders the development and movement of dollars. These factors must be considered before implementing travel restrictions.

Recommendation(s):

1. Plans should be reviewed and revised, if necessary, to ensure that all factors are considered prior to implementing travel restrictions.

Observation 3.3 (Area for Improvement): Lines of communications and command between transportation and public health agencies are unclear.

Reference(s): None

Analysis: During exercise discussions, it was unclear how local TSA and the Transportation Security Operations Center (TSOC) would communicate and coordinate with State and local public health officials. TSA officials said that the TSOC communications network to local transportation was not well developed. During a communicable disease outbreak, valuable time would be lost establishing these lines of communications. This would hinder efforts to contain the spread of a disease.

Additionally, during the exercise, questions arose regarding how things should be handled at private airports like Concord Municipal Airport during large influx of travelers for events such as Speedway weekends. Exercise participants were unaware of any plan in place.

Recommendation(s):

1. Ensure that a communication plan with MHT and other transportation entities has been developed and promulgated.

2. Ensure that MHT and TSA have a clear plan outlining who to contact within local Public Health and State Public Health, as well as how to contact them, when dealing with suspect cases or when notified by TSOC of suspect cases.
3. Ensure State Public Health creates a protocol for communicating and dealing with private airports during a health emergency.

Observation 3.4 (Area for Improvement): Comprehensive planning and direction is needed from Federal and State partners in order to approve the appropriate vessel screening location.

Reference(s): None

Analysis: U. S. Coast Guard officials expressed concerns during this exercise that they would need direction from Federal or State officials regarding where to locate a vessel for screening operations. There was a lack of direction from Federal and State parties regarding their desires and that of the vessel owner. Since this type of event is a public health response, Federal and State health officials wanted to screen personnel on the vessel. If quarantine is ordered, the vessel may have to anchor or moor. The vessel's owner/operators would be concerned with keeping the vessel moving. If it is not moving, it is not making money. Therefore, owner/operators would likely appeal to the Coast Guard to keep the vessel operating: underway, loading, or unloading. Although participants discussed this issue, no one asked the Coast Guard to order the ship to a screening location.

Recommendations(s):

1. If possible have screening locations considered ahead of time by public health officials and the U.S. Coast Guard.

Observation 3.5 (Area for Improvement): Transportation centers need to be included in the State's protocols for activating I&Q plans.

Reference(s): None

Analysis: Due to the large amount of traffic that flows into the State via transportation centers, such as the airport, center staffs have the potential to be on the front lines of stopping or slowing the spread of an infectious disease. However, transportation centers currently lack the plans, training, and equipment to work effectively towards this goal.

Training on the local level would greatly benefit the staffs of transportation centers as well as public health officials. A comprehensive overview of I&Q, such as the one presented at the exercise, would give a better overview of the scope of an I&Q event. If needed, more targeted and specific training can be given. Just-in-time training in person or online could be of great assistance. This training should be accessible to workers prior to a response or before assuming their work shift. This would help them to work better within their comfort zones.

The State has done a great deal of work over the last few years to work with communities to

establish stockpiling sites and quarantine and vaccination areas; however, it appears that the State lacks authority at the point of an exposure. Plans need to be expanded and/or detailed to include modes of transportation and their hubs—these plans exist but are not integrated into State plans. For example, on an aircraft it is possible to isolate a person suspected of exposure so that further exposures can be limited.

It is also possible that specific equipment purchased and installed in transportation hubs, such as the airport, could be used to screen inbound and outbound passengers to help prevent disease spread. During recent history, real-world reports indicate that health officials, coordinating with airport personnel, have been monitoring traveler's temperatures as they move through check points—however, exercise evaluators did not know if such devices are available locally.

Recommendation(s):

1. Develop training for public transportation center personnel to assist with screening passengers and implementing travel restrictions.
2. Review and revise State plans to include Federal transportation plans for isolating and quarantining ill passengers.
3. Study the feasibility or availability of medical screening equipment suitable for transportation centers.
4. Establish or identify the criteria for at-risk transportation centers.

Activity 4: Implement Voluntary I&Q

Activity Definition: Within an identified geographic area, implement separation and restriction of movement of potentially exposed asymptomatic individuals, and isolate symptomatic individuals on a voluntary basis.

Observation: 4.1 (Area for Improvement): There is a lack of knowledge of procedures for monitoring compliance of voluntary I&Q.

Reference(s): None

Analysis: During the exercise, the New Hampshire DPHS representative described the steps taken for routine, voluntary isolation, such as those taken for cases of tuberculosis (TB). The representative described how DPHS conducts the following tasks associated with voluntary isolation:

- Provide medical and supportive care guidance to patients.
- Provide infection control education materials to patients.
- Monitor the health status of voluntarily isolated individuals, caregivers, and medical personnel.

Voluntary I&Q is on a case-by-case basis and usually adhered to; however, the DPHS exercise participants stated that monitoring compliance is typically done on an honor system and monitoring difficulty would increase once the number of cases increased and became more widespread.

Recommendation(s):

1. Increase training opportunities for monitoring and compliance of isolation and quarantine.

Observation 4.2 (Area for Improvement): *The State of New Hampshire I&Q Plan doesn't specifically address enforcement of I&Q of airline passengers.*

Reference(s): None

Analysis: Exercise participants discussed the possibility of a plane landing at MHT with a passenger suspected of having an infectious disease. Airport officials and local first responders detailed their procedures for assessing the patient on board the plane. However, these procedures lacked contingencies for temporarily quarantining other passengers on the plane. It was assumed that the remaining passengers would be compliant and that they would remain on the plane while the first responders and local public health officials examined the suspected ill passenger.

Recommendation(s):

1. Ensure that MHT, local Public Health, and State Public Health form a work group to develop a plan outlining what to do with a plane of both sick and potentially exposed passengers—the plan should at least include a method for I&Q.
2. Evaluate the MHT I&Q plan for use with the State plans.

Activity 5: Implement Mandatory I&Q

Activity Definition: Ensure compliance with orders for separating and restricting movement of potentially exposed, asymptomatic individuals and for isolating symptomatic individuals within an identified geographic area.

Observation 5.1(Strength): *The Coast Guard has the authority to quarantine ships in New Hampshire harbors.*

Reference(s):

1. 14 USC 89
2. 14 USC 141
3. 33 USC 1221 (Ports and Waterways Safety Act of 1972)

Analysis: The Coast Guard is empowered by both civil and criminal law to readily keep a ship in quarantine status without seeking any authority other than that already provided in the U.S.

Code and the Code of Federal Regulations. The broad authority of the Coast Guard over U.S. flag ships and the navigable waters of the United States allows for timely and effectual action with respect to I&Q. The attendant laws also specifically allow for action with and on behalf of other agencies. This is an asset of great benefit because an inbound ship is already somewhat isolated and may be kept so by the Coast Guard.

Recommendation(s):

1. Ensure that State and local Health and Public Safety officers are aware of the unique Coast Guard authority with respect to shipping and ships' crews.
2. Include the referenced laws into the State of New Hampshire I&Q Plan.

CAPABILITY: EMERGENCY PUBLIC INFORMATION AND WARNING

Capability Summary: Develop, coordinate, and disseminate accurate alerts and emergency information to the media and the public prior to an impending emergency, and activate warning systems to notify those most at-risk in the event of an emergency. By refining its ability to disseminate accurate, consistent, timely, and easy-to understand information about emergency response and recovery processes, a jurisdiction can contribute to the well-being of the community during and after an emergency.

Activity 1: Manage Emergency Public Information and Warnings

Definition: In recognition of likely hazards, provide management and coordination of public information, alert/warning, and notification activities.

Observation 1.1 (Strength): *The State of New Hampshire has a method in place to provide timely dissemination of health and safety information to medical personnel.*

Reference(s):

1. <http://www.dhhs.state.nh.us/DHHS/CDCS/healthalertnetwork.htm>

Analysis: The first step in providing emergency public information and warning during a public health emergency is to first provide information to medical personnel. In New Hampshire, an effective Health Area Network (HAN) is in place to notify all health officers, hospitals, medical offices, and fire departments of the emergency. The New Hampshire HAN system is a comprehensive system that operates 24-hours-per-day, 7-days-per-week, 365-days-per-year for public health emergency communications, including notifications and alerts. It is a network of individuals involved in the creation of communications and response to communications around public health emergencies, as well as for several hardware and software systems used for these communications. The network ensures that public health professionals and key response partners have relevant and timely access to information, including information necessary to respond to events that may have urgent public health consequences.

The HAN messages are sent through New Hampshire's primary communication alert system called the *Communicator!NXT*. It rapidly pushes out health alerts via telephone, fax, e-mail and pager. HAN messages are sent to individuals who meet at least one of the following criteria:

- The recipient has a legal obligation to respond to the public health incident.
- A public health incident is occurring in the recipient's jurisdictional area.
- The recipient's participation is essential for completing a public health intervention.

Recommendation(s): None

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

Definition: Activate key personnel, facilities, and procedures.

Observation 2.1 (Area for Improvement): Exercise participants were unsure about notification responsibilities concerning transportation officials and contact information.

Reference(s): None

Analysis: For any type of emergency notification, all personnel must clearly understand who needs to call whom and who is responsible for what type of notification. New Hampshire has the authority but no plan or call lists in place to notify the proper officials about this type of transportation emergency. During exercise discussions, participants were unsure about notification responsibilities and also expressed that they do not know how to reach the appropriate personnel for notification. If there is no clear mechanism for notification during an emergency, then tasks are left undone or take longer than they should, and information does not get to the public in a timely manner. There needs to be a notification system in place to save time, improve response, help get messages out early, and allay public fears.

Recommendation(s):

1. Provide training that outlines agencies that would be involved in every possible type of emergency, along with a specific notification protocol, including titles and phone numbers for those individuals who would need to be notified and by whom.

Observation 2.2 (Area for Improvement): Terms, such as "isolation" and "quarantine," are not well understood by the public.

Reference(s): None

Analysis: It is important that everyone involved understand the difference between isolation and quarantine and when each would be used. There was a greater understanding of how an I&Q event would be handled than in previous exercises, but there was still some uncertainty regarding what isolation and quarantine mean, and the difference between voluntary versus mandatory and who would enforce them. If responders and officials don't fully understand these issues, the

public can't be expected to either. This could cause a great deal of confusion and potentially panic in an already tense situation.

Recommendation(s):

1. A fact sheet/handout should be created explaining the difference between isolation and quarantine and voluntary versus mandatory with tailored versions for the public, responders, legal authorities, etc.
2. There should be more training sessions offered for first responders, emergency personnel, and other interested parties on I&Q, as Public Health did a few years ago.

Activity 3: Establish a Joint Information Center

Definition: Activate and implement a Joint Information Center (JIC) and disseminate information to public.

Observation 3.1 (Area for Improvement): Although exercise participants seemed to understand what the term Joint Information Center (JIC) meant, there was lack of agreement regarding when a JIC would be opened, where, by whom, and who would staff it.

Reference(s): None

Analysis: One of the biggest issues during this exercise, and often with any exercise, is the coordination of communication. This is not to be confused with the dissemination of carefully crafted messages to the public, although they are both important components of disaster response. How communication would be coordinated was definitely a sticking point for this tabletop—it was not addressed to the depth it should have been. Communication issues are complex and include a myriad of partners, so messaging is key. During the exercise discussions, it was clear that no agency expected it would need to send out any information to the public, except DHHS. This may be because the only public information officer (PIO) present was from DHHS, but even so, players should have been aware of who will be creating messages in their agency during a disaster. It is not possible for one person, or even one department, to accomplish this on its own. A JIC should be opened early at the State level. This would help coordinate all types of communication.

The State of New Hampshire should develop a State JIC plan as soon as possible. Because such a plan is a part of State-level response and coordination, it needs to be written and implemented by HSEM. A JIC would basically mirror an Emergency Operations Center (EOC), but with communications people in every Emergency Support Function (ESF)-type position. This would run in tandem with the State EOC. The plan should include job action sheets, and individuals in each agency (not just State) should be trained on how to fill specific roles.

Recommendation(s):

1. Develop a State JIC plan that includes action sheets and checklists.
2. Offer training to potentially involved partners after the plan is written.

3. Offer more training to (and even required it for) responders, partners, and State employees on how a JIC works and basic Incident Command System (ICS) structure.
4. Conduct a series of building block JIC specific exercises.

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CHAPTER 4: CONCLUSION

The New Hampshire Department of Safety (DOS) / Department of Health and Human Services (DHHS) Isolation and Quarantine (I&Q) Tabletop Exercise (TTX) provided players the opportunity to demonstrate their ability to accomplish the goals and tasks associated with this exercise. I&Q is the ability to protect the health of a population through the use of isolation and/or quarantine measures in order to contain the spread of disease. Isolation refers to the separation and restriction of movement of people who are ill with a infectious disease. Quarantine is the separation and restriction of movement of people who have been exposed to a infectious disease but are not symptomatic.

During the exercise, roles and responsibilities of Federal, State, and local agencies were discussed with an emphasis on transportation modes, specifically aviation and maritime. Although there are laws, policies, and procedures to support I&Q, players and evaluators generally observed that additional understanding and coordination of outside agency plans is needed. Players identified decision makers for coordinating an I&Q location for a ship with possibly infectious crew members and a coordinated transportation, first responder, and public health working group exists among Manchester-Boston Regional Airport, local public health, and emergency responders. It was also examined that the State of New Hampshire has a method in place to provide timely dissemination of health and safety information to medical personnel.

This exercise included evaluation of the ability to implement travel restrictions, and within an identified geographic area, implement separation and restriction of movement of potentially exposed, asymptomatic individuals and isolate symptomatic individuals on a voluntary basis. A wide range of authority and ability issues were also discussed with regard to implementation of travel restrictions.

- The U.S. Coast Guard and the Centers for Disease Control and Prevention (CDC) have a great deal of authority and assets to implement very rigorous travel restrictions when they are necessary.
- The Nation's major airports have authority to enforce travel restrictions. Airports and airlines have detailed policies for flights carrying suspect infectious passengers. However, airports and airlines are dependant on Federal, State, and local agencies to activate travel restrictions, provide staff and public emergency information, and provide medical personnel for screening.
- Representatives from rail and motor coach were unavailable for this exercise. The plans, policies, and procedures of these entities to implement travel restrictions was unknown by exercise participants. Additional planning and exercising with this segment of the transportation industry is needed to better understand their role during an I&Q event.
- People's ability to drive within the State's borders; across the country; and even internationally, limits the ability to enforce travel restrictions for anything short of a total prohibition to vehicle traffic.

At all levels of planning for the possibility of implementing travel restrictions there would be a benefit to improved planning, coordinating, and communicating among all responsible agencies

and parties.

Participants discussed emergency public information and warnings for the various scenarios presented. DHHS is experienced and competent at delivering public health messages. The exercise findings stressed the need for public awareness of specific terms, such as isolation and quarantine, as well as their meanings and implications. A mission-level finding for emergency public information and warnings is that the State should review and revise its plans for the operation of a Joint Information Center (JIC).

The State of New Hampshire currently has sufficient legal, logistical, and informational support to institute isolation and quarantine measures. The findings of this exercise can be used on a State and local level to improve existing I&Q plans, policies, and procedures. Areas for improvement and their associated recommendations that are determined to be valid by the exercise planning team are included in an Improvement Plan, along with specific corrective actions. Those items listed as strengths should be shared with entities that were not available for participation in the exercise.

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APPENDIX B: EXERCISE PLANNING TEAM

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APPENDIX D: PARTICIPANT FEEDBACK SUMMARY

Sample Participant Feedback Form

Exercise Name: New Hampshire Isolation & Quarantine Tabletop Exercise

Date: April 16, 2009

Participant Name: _____ **Title:** _____

Agency: _____

Role: Player Observer Facilitator Evaluator

PART I: RECOMMENDATIONS AND CORRECTIVE ACTIONS

1. Based on the exercise today and the objectives identified, list the top 3 issues and/or areas that need improvement.

2. Identify the action steps that should be taken to address the issues identified above. For each action step, indicate if it is high, medium, or low priority.

3. Describe the actions steps that should be taken in your area of responsibility. Who should be assigned responsibility for each action item?

4. List the equipment, training, or plans/procedures that should be reviewed, revised, or developed. Indicate the priority level for each.

(Continued)

PART II – EXERCISE DESIGN AND CONDUCT: ASSESSMENT

Please rate, on a scale of 1 to 5, your overall assessment of the exercise relative to the statements provided below, with **1** indicating **strong disagreement** with the statement and **5** indicating **strong agreement**.

Assessment Factor	Strongly Disagree		Strongly Agree		
a. The exercise was well structured and organized.	1	2	3	4	5
b. The exercise scenario was plausible and realistic.	1	2	3	4	5
c. The exercise documentation provided to assist in preparing for and participating in the exercise was useful.	1	2	3	4	5
d. Participation in the exercise was appropriate for someone in my position.	1	2	3	4	5
e. The participants included the right people in terms of level and mix of disciplines.	1	2	3	4	5

PART III – PARTICIPANT FEEDBACK

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

EVALUATION OF EXERCISE DESIGN AND CONDUCT

After the exercise was complete, all exercise participants, including observers, were asked to rate, on a 1-to-5 scale, their overall assessment of the exercise relative to the statements provided below, with 5 indicating *strong agreement* with the statement and 1 indicating *strong disagreement*. A total of 42 forms were filled out, but only 41 filled out the rating portion and returned the form. The averages for each statement were computed by summing the values of all feedback forms received and dividing by the total number of values. The numerical ratings portion of the Participant Feedback Form was done as an aggregate of all participants and not divided by their State affiliations.

Statements	Average Response	Strongly Disagree			Strongly Agree	
		1	2	3	4	5
(a) The exercise was well structured and organized.	4.29	0.00	0.00	0.07	0.45	0.45
(b) The exercise scenario was plausible and realistic.	4.21	0.00	0.00	0.12	0.43	0.43
(c) The exercise documentation provided to assist in preparing for and participating in the exercise was useful.	3.64	0.02	0.02	0.16	0.52	0.21
(d) Participation in the exercise was appropriate for someone in my position.	4.26	0.00	0.00	0.07	0.48	0.43
(e) The participants included the right people in terms of level and mix of disciplines.	4.07	0.00	0.05	0.12	0.43	0.38

PARTICIPANT RECOMMENDATIONS AND ACTION STEPS

The subsequent sections of the evaluation were open-ended questions, designed to elicit write-in responses. The participating agencies expressed the following top three recommendations

Based on discussions and the tasks identified, participants were asked to list the top three issues and/or areas that need improvement. Responses are as follows:

- Local training & policy development, consistent with state & federal agencies.
- More awareness within my agency is needed being a city with ports, airport, terminals, etc.
- Coordination of all entities as to who/whom need to communicate issues/concerns with
- Public transportation and control of ill travelers
- Tweak existing procedures

- Clarify and direct with need for mandatory I & Q. Might be the prudent action until an evolving situation is resolved.
- Training for LE on I/Q & PPE use
- I/Q locations and protocols on local levels
- Notification “tree” to local LE on I/Q (people under)
- Communication between agencies
- Develop processes/protocols to fill in the gaps identified today
- “Precanned” announcements/templates for public health situations
- Communications – notifications
- Transportation
- Communications between public health and all forms of transport (other than commercial airline)
- Guidelines for type of isolation in a jetliner by type of microbe spread (contact vs. airborne vs. droplet)
- Travel by airlines seems to be controlled, but not other modes of travel
- Communications – not focused on I(isolation), need JIC plan
- Can’t enforce isolation
- Public health network infrastructure in infancy
- Protocols with transportation/federal partners/maritime
- Challenges with transportation – sep bus
- Some jurisdiction disagreement, i.e. who responds – local health dep(t)? State?
- #1 Communication between fed, state & local; #2 Policies; #3 Education of current laws to local agencies
- Place for isolation & quarantine
- Increase knowledge of other agency’s procedures, who to contact and how
- Clarification of laws/authority, Port authority, aviation protocols/procedures; local Emerg. Mgmt plans role with city/state PH notification
- Better communications system to provide mass communications to transportation groups (such as trains, buses, etc)
- A) Communication with non-air/ship transportation; B) General exchange of info/protocols/plans between agencies
- Interagency communication
- Coordinated interagency planning
- 1. Communications between DHHS & HSEM; 2 Plan for quarantine (voluntary); 3 PH role in PIO messages
- Release of passenger manifest
- Involuntary quarantine of passengers on A/C (sic) [aircraft?]
- 1. Protective measures, 2. Notification, 3 Bio hazard tabletop ex
- RSE that deals with mandatory quarantine is weak and “backwards”
- There is a disconnect between Health & Enforcement
- There is no way to enforce quarantine
- Communication to ground transportation
- How to functionally manage mandatory I&Q with a large outbreak

- How to keep (sic) food & supplies to people in I&Q
- Communication between land and sea
- Transportation little control buses, taxis
- Incorporating all Emerg Plans so that someone doesn't have to figure out which scenario fits w/which plan
- 1. Joint information – no JIC plan;
- Protocols/procedure/plan for activation JIC
- Need more involvement from other agency PIO's
- 1 Actual Isolation/Quarantine process; 2 State, local & Federal jurisdiction clarification; 3 all policies and procedures
- 1 Communication; 2 Criteria for IQ imposition; 3 ID of who communicates with whom
- 1 interagency understanding of how to work together; 3 agencies are unclear on their own authorities; 3 clear and concise laws on I &Q
- 1. Refine contingency plan; 2. Quarantine protocols defined beyond initial actions; 3. relationship with ship owners
- Awareness of Coast Guard regulations regarding port control
- Identifying who leads: CDC or NH Public Health
- Specifics on where & how to quarantine
- 1. Establish a de-confliction system between Dept of Health & Law Enforcement; 2 Understanding the communication between CDC and CBP/Coast Guard; 3. Ensure departments have adequate PPE equipment/training
- 1. Challenge to regulate mass/public transit systems; 2 Need to strongly communicate needs/cautions to General Public
- Communication between agencies – clarify relationships
- Develop policy & procedures that are lacking
- Policies of & between governmental agencies (CG, TSA, State & Locals) [need improvement]
- Procedures need between identification of involved agencies
- MOU's to ensure cooperative, appropriate decision-making and operations
- It is clear that NH needs written policies and procedures
- Everybody must be trained in these procedures
- All players need to be at table – clearly everybody who needed to be here was not.
- Clear definition from State level of AHR for Manchester Airport
- Sharing local plans between Manchester EOC and the Airport
- Inclusion of the airport in local planning meetings
- Joint information Center processes in public health crises
- Role of State EOC
- Mandatory quarantine – reality vs. intent
- Discussion of some the plans, policies & procedures (may have) occurred, however, if I wanted to go lack and look up/reference those of other entities/agencies I don't have those identified.

Participants were asked what action steps should be taken to address the issues and to

assign priority level for each. Responses are as follows:

- Med to High Priority. We will begin with policy development and training
- Clinical quarantine of known case & close contacts – high
- Education & notification of all agencies – HAN – high
- Education of public to be aware/protect selves via press releases – mod
- Address some areas with specific guidance would be helpful
- Move to a mandatory I/Q at the beginning OPN incident as opposed to the other way around or using voluntary first
- Public health outreach & clear concise message to all agencies & general public
- Develop policies & procedures – plans
- Form relationships/contact info/protocol/# tree
- Develop plans for restricting travel by other means – medium/low (airline travel more important)
- PIO needs to develop/finalize JIC plan with other agencies
- High – talk/meet/develop communications process
- High – communication with buses
- #1 High – write & detail communication protocol – JIC; #2 Medium – development of policies #3 Medium – presentations, etc. to regions for RCC members
- Review authority of (?) entity (High)
- Develop notification algorithm/process (Med)
- Conduct a more issue focused TTX (low)
- I'm not sure – communications are always hard.
- A) discussion/contact
- B) Increased discussion
- Establish communication protocols High
- Clearly define roles & responsibilities between agencies High
- Coordinate w/ federal agencies to release manifest info
- High – deal with the (illegible word) vis-à-vis quarantine; Med – disconnect between agencies; Low – enforcement of orders
- Another exercise to exclude ground transportation such as bus, train, taxi (?)
- Do we need to include community health nurses from other programs to assist with managing mandatory I/Q
- Acquire a list of people who ride the buses & taxis
- Sign in to board [public transit]
- > (more?) follow up meetings
- 10 JIC plan – high; exercise JIC plan – high; training on JIC – high; 2) plan – high, drill plan – mod; 3 plan – med, drill – med.
- JIC plan needs to be written
- 1 Involve legal to a greater extent. Medium priority; 2 MOU meeting/discussions – High priority; Rewrites = High

- 1 [interagency understanding of how to work together] would have to be addressed on a federal level; 2 clearer legal direction from federal agencies [on their own authorities]; 3 state, clarify I&Q policies and laws
- Work closely with CDC
- Take desires of maritime industry into account
- Read Coast Guard Regs – Low
- CDC or NH Public Health [lead] – Med - High
- Quarantine [specifics] – Med – High
- NHDHHS implement plan to incorporate de-confliction into Intel Awareness Center
- Review CB & Coast Guard plan for incident identification – action
- NHDHHS prepare list of PPE equipment needed by LE so the department can plan & purchase for officers
- Open communication avenue/workshops/symposium w/ transit providers. RE: Public Health Issues (Med Priority)
- Prescript public notice for transit riders (High Priority)
- [Create] sub committee [to develop {Communication between agencies – clarify relationships}]
- Each agency develop drafts [of policies & procedures] for review internally and between partners
- Agencies should review plans in light of exercise, and participate in work group(s) of involved agencies and revise plans & procedures
- [develop] task force – high
- Draft protocols – high (Adoption)
- [Need for] training - high
- Clear definition from State level of AHR for Manchester Airport - High
- Sharing local plans between Manchester EOC and the Airport - High
- Inclusion of the airport in local planning meetings – High
- Convene meeting of appropriate PIOs to develop plans for public health emergency. – include mass transit – High
- Crosswalk PH emergency plans with SEOP – Medium
- Create/distribute a list of applicable reference & if available, provide public access (web) sites.

Participants were asked to list the steps and actions in their area of responsibility and to indicate who should be assigned responsibility for each action item. Responses are as follows:

- Identify cases/contacts, facilitate treatment, I&Q notification. Then notify any manager → state epi → Director of PH who then addresses public
- Support operations to review any revise (sic) Public Health Administrator
- Notifications to public health partners as well as safety/local officers should occur – system in place
- Coordinated plans
- Federal – sharing of current plan helpful

- Drill and exercise
- Surveillance – need to continue working or ensuing COOP is in place and practiced
- Notification protocols DPHS
- Flu discussion meeting with scenario folks
- I didn't come away with any.
- Protocols re: Q& I
- Recurrent review of existing protocols
- Coordinate response onto airport property, while maintaining public safety
- Plan review/establish working group
- Coordination with HQ on specific Bio threat
- Policy only at the Division Commande4r & Chief level
- Director notified [at level] greater than PHNC [with] greater investigation of diagnosed case and contacts.
- Supervisors and heads of departments at the state level
- DHHS PIO can be part of HSEM's committee to provide input on establishing JIC plan
- Increase communication between all partners
- Get more for the quarantine location
- Planning – myself, CDC, HHS, PHS, state PHS and industry
- Clear plan with good references to back up the decision making process
- Identify ICE response when detainees are infected in a facility to ensure all agents are aware of them
- Have people available for planning
- Increase training
- Create protocols
- Collaboration
- Public Health preparedness coordinator
- DHHS PIO convene meeting DHHS & HSEM
- Convene a meeting of appropriate PIO's to develop a plan for public health emergencies. Include mass transit.
- Crosswalk Public Health emergency plans with State Emergency Operations Plane.
- Create and distribute a list of applicable Public Health references and if available provide public access websites.

Participants were asked to list the equipment, training or plans/procedures that should be reviewed, revised or developed and to indicate the priority level for each. Responses are as follows:

- Sharing of plans/procedures between agencies
- Coordinate dissemination of procedures with relevant agencies
- Review training of reporting personnel on the procedures
- Specific PPE for LE, especially at the airport
- Training in I/Q & integration with other agencies
- JIC Plan – high priority

- COOP – all agencies
- Continue with drills/tabletops
- High – communications with the airport and Coast Guard
- Plans – regional AHHR plans – medium
- Review notification procedures
- Develop community protocol with port authority
- Protocols
- We are currently developing an all hazard plan – high
- Continue review and adjustment of response procedures
- M95 masks and PPE gear for all personnel
- Sharing of plans
- Policies & procedures from airports – DO NOT FLY LIST
- Find place that all Emergency Plans can be stored for easy reference
- Exercise/drill on establishing a JIC
- The federal agencies need to have through training in their authority. State needs a much clearer I&Q plan
- Our MOU's Concept of Operations plans all under development
- DHS contingency plan
- MOU's between state and federal agencies
- PPE equipment
- CRP/Coast Guard plans for stowaways at port of Portsmouth
- Upcare (sic) existing one & develop short summary of each
- Mass care/feeding for isolated/quarantined individuals
- Written plans needed
- All local public health plans in Manchester should include role of airport.

Participants were asked what changes they would make to improve this exercise. Responses are as follows:

- Should 2 or 3 days; would like to see sample policies; would like to see a definitive procedure & protocol in place shortly after. The exercise is futile without positive change
- My only problem was with seating, not enough room for all participants
- The exercise discussions bring up other issues that can't get addressed during the exercise – maybe an exercise of this magnitude could be broken down into 2 exercises?
- Well done – Lines of communications identified & enhanced awareness of knowledge & resources
- Invite local and diverse transport
- Larger room; if possible; air circulation issue: room cool in AM, warm and stuffy in PM.
- Overall very well-planned, good facilitation
- I thought it was a very good exercise. Always good to meet the players. Each incident is unique and requires a unique response.
- More local planners/responders; private businesses represented?

- Great to have civilians and Coast Guard. Would be nice to have more – State DOT, Marine Patrol, etc.
- Play out a little further – more detail
- It was a great mix for discussions
- Very helpful to see the communication structures in place
- This was not really a “tabletop” exercise. The same goals could be accomplished via training and conferences along with discussions.
- More space, even temperature, lunch was great. Speakers were well versed & knowledgeable on how to run a meeting. Marine & Transportation had so much knowledge of what they would do – should be a workshop to inquire (sic) what they can do & not do.
- Facilitation was inconsistent throughout the day. Most times only certain participants were called on, making it a BORING day for some of us. Better facilitation would allow for broader participation instead of limiting it to a few. For modules, the Questions developed were good, but we didn’t get to many of them.
- There was only one PIO person – there should have been common (?) people from other agencies. PIO/Communication issues weren’t talked about enough. Never enough time.
- Involve more communications PIO experts
- Larger room, use microphone/speaker system; Don’t assign seating, encourage more “mixing” of participants
- More audio/video aids
- Too much to cover & sort in this amount of time. The drill should [illegible] that there is so much clarification needed. Please work on the clarification
- The exercise was excellent; PowerPoint was first-rate. Excellent facilitation and issue discussions. Perspective will help further my plan development. Thank you for having us!
- Maybe cut down on the number of scenarios – 4 variations/scenarios were a challenge to discuss all of the issues that they presented.
- Include individuals from network sites
- A bigger room would be nice. Small group discussions based on discipline; Increase experiential learning; break exercise up into Part I (day 1), Part II (day 2), Part III (day 3); make this an ongoing process; increase cross-section/diversity of players; follow up
- Great job! Would have liked to see/hear more about the role of the SEOC & State JIC & local EOCs, local Health Officer.

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APPENDIX E: ACRONYM LIST

This glossary has been developed to capture terms that commonly occur in responding to a wide array of emergencies.

A

AAR	After-Action Report
ACF	Alternate Care Facility
AHHR	All Health Hazards Region
ALS	Advanced Life Support
ANG	Air National Guard
ARNG	Army National Guard

B

BLS	Basic Life Support
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C

CDC	Centers for Disease Control and Prevention
CONPLAN	Concept of Operations Plan

D

DOA	Dead on Arrival
DOE	Department of Education
DOJ	Department of Justice
DOS	Department of Safety
DOT	Department of Transportation
DPHS	Division of Public Health Services (New Hampshire)

E

EAS	Emergency Alert System
ED	Emergency Department
EMA	Emergency Management Agency
EMS	Emergency Medical Services
EOC	Emergency Operations Center
ER	Emergency Room
ESF	Emergency Support Function

F

FBI	Federal Bureau of Investigation
FCO	Federal Coordinating Officer
FEMA	Federal Emergency Management Agency

G**H**

HAN	Health Alert Network
HHS	Health and Human Services (Department of)
HSEM	Homeland Security and Emergency Management

I

I&Q	Isolation and Quarantine
ICC	Incident Command Center
ICP	Infection Control Practitioner
ICS	Incident Command System
ICU	Intensive Care Unit

J

JIC	Joint Information Center
JOC	Joint Operations Center
JPIC	Joint Public Information Center
JTF	Joint Task Force

L

LE/LEA	Law Enforcement/Law Enforcement Agency
LEO	Law Enforcement Officer
LFA	Lead Federal Agency
LNO	Liaison Officer

M

MACC	Multi-Agency Coordination Center
MACE	Multi-Agency Coordinating Entities
MCI	Mass Casualty Incident
MOU	Memorandum of Understanding

N

NCID	National Center for Infectious Diseases
NDMS	National Disaster Medical System
NIH	National Institutes of Health
NIOSH	National Institute of Occupational Safety and Health

O

OER Office of Emergency Response (HHS)
OPS Operations

P

PCR Polymerase Chain Reaction
PDD Presidential Decision Directive
PIO Public Information Officer
POC Point of Contact
POD Point of Dispensing
PPE Personal Protective Equipment

R

ROC Regional Operations Center

S

SARS Sudden Acute Respiratory Syndrome
SCO State Coordinating Officer
SITMAN Situation Manual
SITREP Situation Report
SNHU Southern New Hampshire University
SNS Strategic National Stockpile
SOP Standard Operating Procedure

T

TCL Target Capabilities List
TTX Tabletop Exercise

U

UCS Unified Command System
USDHS U.S. Department of Homeland Security
USPHS U.S. Public Health Service

V**W**

WHO World Health Organization