[Insert special pathogen name] Patient Transportation Exercise

Exercise Plan

[Date]

The Exercise Plan (ExPlan) is to serve as a template to support health care delivery sites for highly infectious disease preparedness and response through exercises. This ExPlan gives players, observers, evaluators, and others participating in a healthcare facility the information needed to observe, evaluate, or participate in this exercise. This template is designed to be customized to a specific facility and provides the flexibility to meet the needs of a specific facility or community.

**Table of Contents**

[Exercise Overview 2](#_Toc147318937)

[General Information 6](#_Toc147318938)

[Exercise Objectives and Core Capabilities 6](#_Toc147318939)

[Table 1. Exercise Objectives and Associated Core Capabilities 7](#_Toc147318940)

[Participant Roles and Responsibilities 7](#_Toc147318941)

[Exercise Assumptions and Artificialities 8](#_Toc147318942)

[Assumptions 8](#_Toc147318943)

[Artificialities 8](#_Toc147318944)

[Exercise Logistics and conduct 9](#_Toc147318945)

[Logistics 9](#_Toc147318946)

[Special Pathogen Selection 9](#_Toc147318947)

[Pathway of Movement 9](#_Toc147318948)

[Exercise Duration and Timing 9](#_Toc147318949)

[Conduct 10](#_Toc147318950)

[Notice vs No-Notice-Drill 10](#_Toc147318951)

[Exercise Safety 10](#_Toc147318952)

[Communication 10](#_Toc147318953)

[Post-exercise and Evaluation Activities 11](#_Toc147318954)

[Evaluation 11](#_Toc147318955)

[Participant Feedback Form 11](#_Toc147318956)

[Controller and Evaluator Debriefing 11](#_Toc147318957)

[Exercise Hot Wash 11](#_Toc147318958)

[Evaluation 11](#_Toc147318959)

[Exercise Evaluation Guides 11](#_Toc147318960)

[After-Action Report 11](#_Toc147318961)

[Improvement Planning 12](#_Toc147318962)

[APPENDIX A: MASTER SCENARIO EVENTS LIST 13](#_Toc147318963)

[Appendix B: Participant Feedback Form 15](#_Toc147318964)

[Appendix C: Exercise Hotwash Template 16](#_Toc147318965)

[Appendix D: Sign-In Sheet 17](#_Toc147318966)

[Appendix E: Abbreviations 18](#_Toc147318967)

Developed by:

NYC Health + Hospitals/Bellevue, Special Pathogens Program

Jory Guttsman, MPA, CHEP, EMT-B

Director, Emergency Management

Email: jory.guttsman@nychhc.org

Last update/review: October 2023

# Exercise Overview

| **Exercise Name** | [Insert special pathogen name] Patient Transportation Exercise |
| --- | --- |
| **Exercise Date** | [Indicate the date of the exercise] |
| **Scope** | This exercise is a drill planned for [exercise duration] at [exercise location]. Exercise play is limited to [exercise parameters]. |
| **Mission Area(s)** | Prevention, Protection, Mitigation, and Response |
| **Core Capabilities** | Foundation for Health Care and Medical Readiness – The community’s health care organizations have strong relationships, identify hazards and risks, and prioritize and address gaps through planning, training, exercising, and managing resources. Health Care and Medical Response Coordination – Health care organizations, the HCC, their jurisdiction(s), and the ESF-8 lead agency plan and collaborate to share and analyze information, manage and share resources, and coordinate strategies to deliver medical care to all populations during emergencies and planned events. Continuity of Health Care Service Delivery – Health care organizations, with support from the HCC and the ESF-8 lead agency, provide uninterrupted, optimal medical care to all populations in the face of damaged or disabled health care infrastructure. Health care workers are well-trained, well-educated, and well-equipped to care for patients during emergencies. Simultaneous response and recovery operations result in a return to normal or, ideally, improved operations.[Foundation for Health Care and Medical Readiness, Health Care and Medical Response Coordination, Continuity of Health Care Service Delivery, and Medical Surge][[1]](#footnote-2) |
| **Objectives** | 1. Determine the [amount of time] it takes for [insert EMS agency] to respond to facility, don Personal Protective Equipment (PPE) and be ready to receive patient for transportation.
2. Assess [insert facility location name] staff’s adherence to don appropriate PPE for a patient with [insert special pathogen name] [insert target timeframe if applicable].
3. Assess [insert facility location name] staff’s ability to notify facility leadership and activate emergency plans and procedures [insert target timeframe if applicable].
4. Assess [insert facility location name] staff’s ability to implement appropriate infection control precautions to minimize exposure to [insert pathogen name].
5. Assess [insert facility location name] ability to conduct coordination with [insert EMS agency], [insert receiving facility], and local public health department.
6. Assess [insert facility location name] ability to coordinate patient transfer with [insert EMS agency].
7. Assess [insert facility location name] waste management process [insert target timeframe if applicable].
 |
| **Threat or Hazard** | Emerging Infectious Disease - [insert name of special pathogen] |
| **Scenario** | A [insert actor age]-year-old [male/female] arrives at the [insert location] of [insert facility name] with clinical symptoms of [insert special pathogen clinical symptoms] and recent travel history to [insert relevant country]. The patient is determined to need transportation to the Special Pathogen Treatment Center (SPTC) or Regional Emerging Special Pathogen Treatment Center (RESPTC).  |
| **Sponsor** | [Insert the name of the sponsor organization, as well as any grant programs being utilized, if applicable] |
| **Participating Organizations** | [Insert a brief summary of the total number of participants and participation level (i.e., Federal, State, local, Tribal, non-governmental organizations (NGOs), and/or international agencies). Consider including the full list of participating agencies in Appendix B. Delete Appendix B if not required.] |
| **Point of Contact** | [Insert the name, title, agency, address, phone number, and email address of the primary exercise POC (e.g., exercise director or exercise sponsor)] |

# General Information

## Exercise Objectives and Core Capabilities

The following exercise objectives in Table 1 describe the expected outcomes for the exercise. The objectives are linked to core capabilities, which are distinct critical elements necessary to achieve the specific mission area(s). The objectives and aligned core capabilities are guided by elected and appointed officials and selected by the Exercise Planning Team.

| Exercise Objective | Core Capability |
| --- | --- |
| Determine the [amount of time] it takes for [insert EMS agency] to respond to facility, don Personal Protective Equipment (PPE) and be ready to receive patient for transportation. | Foundation for Health Care and Medical Readiness[insert relevant core capability(s)] |
| Assess [insert facility location name] staff’s adherence to don appropriate PPE for a patient with [insert special pathogen name] [insert target timeframe if applicable]. | Foundation for Health Care and Medical Readiness[insert relevant core capability(s)] |
| Assess [insert facility location name] staff’s ability to notify facility leadership and activate emergency plans and procedures [insert target timeframe if applicable].  | Health Care and Medical Response Coordination[insert relevant core capability(s)] |
| Assess [insert facility location name] staff’s ability to implement appropriate infection control precautions to minimize exposure to [insert pathogen name].  | Health Care and Medical Response Coordination[insert relevant core capability(s)] |
| Assess [insert facility location name] ability to conduct coordination with [insert EMS agency], [insert receiving facility], and local public health department.  | Health Care and Medical Response Coordination[insert relevant core capability(s)] |
| Assess [insert facility location name] ability to coordinate patient transfer with [insert EMS agency].  | Continuity of Health Care Service DeliveryMedical Surge[insert relevant core capability(s)] |
| Assess [insert facility location name] waste management process [insert target timeframe if applicable].  | Health Care and Medical Response Coordination[insert relevant core capability(s)] |

Table 1. Exercise Objectives and Associated Core Capabilities

## Participant Roles and Responsibilities

The term *participant* encompasses many groups of people, not just those playing in the exercise. Suggestions of participant roles and their respective responsibilities are as follows:

| Role | Suggested Personnel | Responsibilities |
| --- | --- | --- |
| **Players** | * Emergency Department or other frontline nurse
* Emergency Department or other frontline physician
* Infection Control Personnel
* Facility Medical Director or Service Chief
* Facility EMS Coordinator
* Emergency Medical Technicians (EMTs)

  | Players are personnel who have an active role in discussing or performing their regular roles and responsibilities during the exercise. Players discuss or initiate actions in response to the simulated emergency. |
| **Controllers** | * Infection Control Personnel
* Emergency Manager
* Actor
 | Controllers plan and manage exercise play, set up and operate the exercise site, and act in the roles of organizations or individuals that are not playing in the exercise. Controllers direct the pace of the exercise, provide key data to players, and may prompt or initiate certain player actions to ensure exercise continuity. In addition, they issue exercise material to players as required, monitor the exercise timeline, and supervise the safety of all exercise participants.  |
| **Simulators (Simulation Cell)**  | * Personnel from local health department, or
* Internal facility infection control personnel playing the role of the provider access line at the department of health
* Personnel from receiving hospital, or internal personnel playing the role of the receiving hospital provider
 | Simulators are control staff personnel who role play nonparticipating organizations or individuals. They most often operate out of the Simulation Cell (SimCell), but they may occasionally have face-to-face contact with players. Simulators function semi-independently under the supervision of SimCell controllers, enacting roles (e.g., media reporters or next of kin) in accordance with instructions provided in the Master Scenario Events List (MSEL). All simulators are ultimately accountable to the Exercise Director and Senior Controller.  |
| **Evaluators** | * Infection Control Personnel
* Emergency Manager
* Actor
 | Evaluators evaluate and provide feedback on a designated functional area of the exercise. Evaluators observe and document performance against established capability targets and critical tasks, in accordance with the Exercise Evaluation Guides (EEGs).  |
| **Actors** | * Individual with knowledge/medical background playing role of actor
 | Actors simulate specific roles during exercise play, typically victims or other bystanders. |

## Exercise Assumptions and Artificialities

In any exercise, assumptions and artificialities may be necessary to complete play in the time allotted and/or account for logistical limitations. Exercise participants should accept that assumptions and artificialities are inherent in any exercise, and should not allow these considerations to negatively impact their participation.

### Assumptions

Assumptions constitute the implied factual foundation for the exercise and, as such, are assumed to be present before the exercise starts. The following assumptions apply to the exercise:

* The exercise is conducted in a no-fault learning environment wherein capabilities, plans, systems, and processes will be evaluated.
* The exercise scenario is plausible, and events occur as they are presented.
* Exercise simulation contains sufficient detail to allow players to react to information and situations as they are presented as if the simulated incident were real.
* Participating agencies may need to balance exercise play with real-world emergencies. Real-world emergencies take priority.

### Artificialities

During this exercise, the following artificialities apply:

* Exercise communication and coordination is limited to participating exercise organizations, venues, and the SimCell.
* Only communication methods listed in the Communications Directory are available for players to use during the exercise.] For an emergency that requires assistance, use the phrase **[“real-world emergency.”]**

# Exercise Logistics and conduct

## Logistics

Exercise planning team should take the following logistical considerations into planning consideration BEFORE exercise conduct and edit the Exercise Template as needed:

### Special Pathogen Selection

Each Patient Transportation Exercise will differ depending on special pathogen/infectious disease chosen.

* Highly infectious disease (special pathogens) with a high rate of person-to-person transmission would require prompt identification, isolation and implementation of key infection control measures (e.g. Ebola).
* Other infectious diseases threats with low rate of person-to-person transmission would not require prompt isolation or implementation of enhanced infection control measures (e.g. Zika).

### Pathway of Movement

Depending on the healthcare facility’s plans and agreements with EMS, the pathway from the isolation room to the awaiting ambulance should be established before-hand and walked with members of the exercise planning team. This should include:

* Room where patient will be
* Hallways to and from the room
* Staging locations for staff
* Staging locations for the waiting ambulance

### Exercise Duration and Timing

Each Patient Transportation Exercise will differ depending on the scope of the exercise and needed participants. Some considerations to include are:

* Impacts to operational clinical areas.
* Whether the ambulance will be waiting or called to respond.
* Donning and doffing times for PPE
* Physical distance between room and ambulance, including complicating factors such as elevators or access control
* Waste process

## Conduct

Exercise planning team should take the following exercise conduct considerations into planning consideration DURING exercise conduct and edit the ExPlan template as needed:

### Notice vs No-Notice-Drill

Each Patient Transportation Exercise will differ depending on exercise planning team selection of notice- or no-notice drill method.

* Notice Transportation Exercise is when all exercise participants including facility contacts are aware this is a drill and not a real-world event. This is a more-likely scenario due to the dedication of resources to the exercise activity.
* No-notice Transportation Exercise is when only key exercise participants including facility contacts (trusted agents) are aware this is a drill and not a real-world event. Exercise players (e.g., EMS agency, Nurse) do not know this is a drill and perceives this event as a real-world incident). Use of a no-notice exercise would be limited in the objectives provided, as many would be depending on facility staff being aware and treating a PUI for a special pathogen.

### Exercise Safety

Any safety concerns must be immediately reported to the designated individual(s) (e.g., actor, controller, and evaluator). The designated individual(s) will determine if a real-world emergency warrants a pause in exercise play and when exercise play can be resumed.

* Safety of all exercise participants is essential.
* At no point should facility staff perform any invasive procedures or administer any medication to the actor. (Tip: actor with medical knowledge/background is preferred as s/he should be able to gauge if facility staff plan to perform or administer any procedures/drugs that would warrant exercise endex).
* Conduct an actor pre-briefing before exercise startex to ensure the actor understands their role, responsibilities and safety considerations.

### Communication

Each Patient Transportation Exercise communication will differ depending on special pathogen/infectious disease chosen, exercise players involved and overall exercise scope.

* If using a Simulation Cell (SimCell), for coordination call, ensure players are provided with the correct phone number or location to participate.

# Post-exercise and Evaluation Activities

## Evaluation

Exercise planning team should take the following exercise evaluation considerations into planning consideration BEFORE and AFTER exercise conduct and edit the provided materials as needed:

### Participant Feedback Form

All players and participants in the Exercise Hot Wash should be given the Participant Feedback Form which provide players with the opportunity to comment candidly on exercise activities and exercise design. Participant Feedback Forms should be collected at the conclusion of the Hot Wash.

### Controller and Evaluator Debriefing

Controllers and evaluators attend a facilitated C/E Debriefing with the actor immediately following the exercise. During this debriefing, controllers and evaluators provide an overview of their observed functional areas and discuss strengths and areas for improvement before the Exercise Hot Wash with the group at large. This should not exceed 30 minutes.

### Exercise Hot Wash

Every Patient Transportation Exercise should have a scheduled 30 minute to 60 minute exercise debrief with all exercise participants and appropriate facility personnel depending on location of drill (e.g., CMO, CNO, Infection Control, ED Director, etc.) preferably immediately after the exercise to discuss exercise outcome including strengths, weaknesses, areas for improvement and threats (SWOT Analysis) **[Appendix C].** Evaluators should clarify any player actions and decision-making processes.

## Evaluation

### Exercise Evaluation Guides

EEGs assist evaluators in collecting relevant exercise observations. EEGs document exercise objectives and aligned core capabilities, capability targets, and critical tasks. Each EEG provides evaluators with information on what they should expect to see demonstrated in their functional area. The EEGs, coupled with Participant Feedback Forms and Hot Wash notes, are used to evaluate the exercise and compile the After-Action Report (AAR). **[TEMPLATE PROVIDED]**

### After-Action Report

Every exercise should document exercise outcome and areas for improvement through an After Action Report / Improvement Plan. The AAR summarizes key information related to evaluation. The AAR primarily focuses on the analysis of core capabilities, including capability performance, strengths, and areas for improvement. AARs also include basic exercise information, including the exercise name, type of exercise, dates, location, participating organizations, mission area(s), specific threat or hazard, a brief scenario description, and the name of the exercise sponsor and POC. **[TEMPLATE PROVIDED]**

### Improvement Planning

Improvement planning (IP) is the process by which the observations recorded in the AAR are resolved through development of concrete corrective actions, which are prioritized and tracked as a part of a continuous corrective action program. The IP identifies specific corrective actions, assigns them to responsible parties, and establishes target dates for their completion. **[TEMPLATE PROVIDED]**

# APPENDIX A: MASTER SCENARIO EVENTS LIST

| **Event #** | **Event Time** | **Event Description** | **Recipient Player(s)** | **Expected Outcome of Player Action** |
| --- | --- | --- | --- | --- |
| **Exercise Briefing:** 1. Have all exercise participants Sign-In
2. Recap rules and safety measures of exercise play
3. Inform all exercise participants of Hot Wash location
 |
| 01 |  | [If applicable]Providers don PPE before exercise plan begins, if not included as an objective of the exercise | [Example: ED Nurse, EMS Provider] | * EMS Providers/ED staff don PPE
* PPE donned in correct manner, with appropriate observers
 |
| 02 | StartEx | EMS Arrival to healthcare facility | [Example: EMS Provider, ED RNs] | * Ambulance arrives to designated location
* Correct staff members greet and present patient to EMS providers
 |
| 03 |  | [If applicable] EMS Providers don appropriate PPE | [Example: ED Nurse, EMS Provider] | * EMS Providers don PPE
* PPE donned in correct manner, with appropriate observers
 |
| 04 |  | ED Staff (Nurses, Physicians, etc.) prepare patient for transfer to EMS | [Example: ED RNs, ED MDs, ED Leadership] | * Patient is wrapped per protocol and placed on appropriate stretcher
 |
| 05 |  | ED Staff secure patient movement pathway | [Example: ED RNs, ED MDs, Security Department] | * Staff secure pathway to minimize traffic to reduce risk of exposure
 |
| 06 |  | Patient or PUI is moved to EMS stretcher [insert identified location] and to ambulance | [Example: ED Nurse, EMS Provider] | * Staff adhere to infection control measures to reduce risk of exposure
 |
| 07 |  | Patient’s isolation room is terminally cleaned and disinfected, based on protocols | [Example: ED RNs, Housekeeping] | * Room is terminally cleaned and readied in an established timeframe [insert timeframe, if applicable]
 |
| 06 | EndEx | Doffing | [Example: ED Nurse, ED MD, EMS Personnel] | * Staff follow PPE Doffing procedures
 |
| 07 |  | **At the end of exercise play Controllers must ensure:** 1. “Exercise End” Announcements are made
2. Players attend the scheduled Hotwash
3. Immediately provide and collect completed Participant Feedback Forms from splayers
4. Remove exercise signage (if applicable)
 |

# Appendix B: Participant Feedback Form

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Contact Information: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Participant Recommendations and Corrective Actions**

1. Based on your facility actions and your opinions, list the top three strengths you identified.

|  |
| --- |
|  |
|  |
|  |

1. Based on your facility actions and your opinions, list the top areas you identified that are in need of improvement.

|  |
| --- |
|  |
|  |
|  |

##### **Overall drill rating:**

* Excellent
* Above average
* Average
* Fair
* Poor

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

# Appendix C: Exercise Hotwash Template

|  |
| --- |
| **Hot Wash**  |
| **Date of Exercise:** |  |
| **Location of Exercise:**  |  |
| **List Participants in Hot Wash:**  |  |
| **Facilitator:** |  |
| **SWOT Analysis** |
| **Strengths:** | **Weaknesses:** |
| **Opportunities:** | **Threats:** |
| **Exercise Design** |
| **Improvements on drill design?** |  |
| **Improvements on drill implementation?** |  |

# Appendix D: Sign-In Sheet

| Name | Agency/Department | Title/Contact Information |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# Appendix E: Abbreviations

| Acronym | Term |
| --- | --- |
| AAR | After Action Report |
| AIIR | Airborne Infection Isolation Room |
| ASPR | Administration for Strategic Preparedness and Response |
| ED | Emergency Department |
| EID | Emerging Infectious Disease |
| EMS | Emergency Medical Services |
| EMT | Emergency Medical Technician (Basic, Intermediate, Paramedic) |
| EOC | Emergency Operations Center |
| ER | Emergency Room |
| ESF | Emergency Support Function |
| HCID | High-Consequence Infectious Disease |
| HHS | Health & Human Services (US Department of) |
| HSEEP | Homeland Security Exercise & Evaluation Program |
| ICC | Incident Command Center |
| PPE | Personal Protective Equipment |
| PUI | Person/Patient Under Investigation |
| RESPTC | Regional Emerging Special Pathogen Treatment Center |
| SPTC | Special Pathogen Treatment Center |

1. 2017-2022 Health Care Preparedness and Response Capabilities: https://aspr.hhs.gov/HealthCareReadiness/guidance/Documents/ASPR-Preparedness-Response-Capabilities-FactSheet-508.pdf [↑](#footnote-ref-2)