
Infectious Disease Preparedness in the Primary Care Setting: Lessons Learned from Ebola Preparedness Site Visits and Mystery Patient Drills



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Session Objectives

- Discuss recent PCEPN initiatives to support/increase infectious disease preparedness in the primary care setting
- Review gaps, strengths, and performance improvements identified through the Ebola Preparedness Site Visits and Mystery Patient Drill Project
- Review available training & exercise tools to support infectious disease preparedness among primary care staff

Infectious Disease Preparedness



- Primary Care Centers serve diverse and vulnerable populations and are essential proxy for surveillance of infectious/communicable diseases.
- Primary Care Center staff must be engaged and educated to support ongoing vigilance and infection control strategies.
- Increased awareness among primary care providers enhances their ability to identify patient signs and risk factors, prompting measures to prevent transmission, both in the primary care setting and the communities served.

DOHMH Background

DOHMH's Role in an NYC Emergency:

DOHMH is the lead City agency during a citywide public health emergency event, like H1N1 Pandemic Influenza. Our responsibilities are to:

- Identify diseases and determine which people are most at risk of catching those diseases.
- Provide guidance to the Healthcare Community about the identification and treatment of disease.
- Provide the public information about the emergency.
- Distribute medication to the public, if necessary.
- Provide safety information to the public and emergency workers when there are hazards in the environment that may affect their health.
- Coordinate mental health needs and services.
- Provide staff for Emergency Evacuation Shelters.
- Continue to provide critical agency services.

How does DOHMH Communicate with Providers?

- Develop guidance documents specific to NYC primary care centers and providers
- Provide information to providers through [Health Alerts](#)
- Staff Provider Access Line for reporting immediately notifiable conditions (1-866-692-3641)
- Provider Education via [City Health Information \(CHI\) Bulletin](#)

Why screening and isolation?

- NYC has a high volume of travelers from all over the world – travel-associated infections, including those that are highly communicable, are of great concern
- Recognizing and appropriately managing the care of patients with highly communicable diseases of public health concern can prevent spread of illness to other patients, staff, and visitors
- Clinics and Emergency Departments are frontline points of entry into the healthcare system
- Effective strategies for triage and implementation of infection control precautions will reduce transmission of communicable diseases in healthcare settings

Ebola Preparedness and Response in NYC

Ebola Preparedness Timeline

August 8,
2014

- WHO declared the Ebola Virus Disease (EVD) epidemic, a public health emergency of international concern

October 3,
2014

- DOHMH activated the Agency Incident Command System
- DOHMH Healthcare System Support Branch (HSSB) activated and partnered with PCEPN for EVD preparedness and planning for Primary Care Centers

October 16,
2014

- NYS Health Commissioner issued an order outlining the requirements for the management and treatment of persons under investigation (PUI) and confirmed cases of EVD

October 23,
2014

- NYC, NYCEM activated ESF-8 (Health and Medical) to support and coordinate public health response (confirmed case of EVD in NYC)

Ebola Preparedness Timeline

November
2014

- Pre-planning phase
- Developing goals and objectives of Ebola Preparedness Site Visits
- Developed concept of operations and execution (number of staff needed)

December
2014

- Developed Site Visit Guide and Toolkits
- Outreach to Sites
- Recruitment of Sites

January
5, 2015

- Implementation phase
- Schedule of site visits with DOHMH and PCEPN staff members
- PCEPN and DOHMH conducted first Ebola Preparedness Site Visit (2 hours)

May 2015

- Post-site visits
- PCEPN completed the final Ebola Preparedness Site Visit (61 Visits Total)
- Draft findings/results

Ebola Preparedness Site Visits

Ebola Preparedness Site Visit Objectives

- Understand preparedness activities related to Ebola at ambulatory care sites
- Provide information to support preparedness and response specific to New York City
- Identify specific infection control steps to protect against EVD exposure and transmission
- Collect questions and concerns on behalf of ambulatory care sites to address with CDC, SDOH or DOHMH experts

Site Visit Planning and On-Site Support

- DOHMH developed a site visit guide to capture details on current protocols and preparedness activities and provided toolkits detailing recommended steps for triage in ambulatory care settings & telephone triage.
- DOHMH and PCEPN staff members partnered to form teams to conduct site visits comprised of two components:
 - Review of DOHMH Guidance Documents with frontline and clinical staff
 - A walkthrough of the facility focusing on the “Identify, Isolate, Inform” Strategy

Toolkit Documents

NYC
Health

Identifying Patients with Possible Ebola Virus Disease in Ambulatory Care Settings Telephone Triage

If patients call the office for a sick visit, and you suspect Ebola Virus Disease, take appropriate action, and tell public health authorities immediately. The vast majority of febrile patients in ambulatory settings do not have Ebola, and the risk posed by an Ebola patient with early, limited symptoms is lower than that of a patient hospitalized with severe disease. Still, because early Ebola symptoms mirror other febrile illnesses, triage and evaluation should account for the possibility of Ebola.

Screen every patient who calls to schedule a sick visit.

Ask about:
(1) Travel and exposure history: "Have you traveled to an Ebola affected country* or had contact with a confirmed Ebola case in the 21 days before you started to feel sick?"

NO

NO RISK FOR EBOLA:
Continue with usual triage, assessment and scheduling.

YES

*Unilateral transmission of Ebola virus disease is occurring in the West African countries of Guinea, Liberia and Sierra Leone. Other countries may occasionally have limited transmission in settings with unreported control measures. See the CDC website for the most recent information: <http://www.cdc.gov/eid/content/vol21/16/2116a11a11.htm>

Ask about:
(2) Signs and symptoms: "Do you have fever (subjective or measured) or headache, weakness, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained bleeding?"

NO

PATIENT MAY BE SCHEDULED FOR OFFICE VISIT:

- 8a) Ask patient if the NYC Health Department has been speaking with him/her daily about his/her temperature and symptoms.
- 8b) If "Yes," continue with usual triage, assessment and scheduling.
- 8c) Obtain patient name, date of birth, current address, current phone number(s), West African country traveled from and dates of travel.
- 8d) Tell patient that the Health Department will contact him/her to monitor for fever and symptoms for 21 days after last exposure.
- 8e) Call the Health Department Provider Access Line at 1-800-492-3641 to enroll the patient in active monitoring.
- 8f) Continue with usual triage, assessment and scheduling.

YES

NO RISK FOR EBOLA:
Continue with usual triage, assessment and scheduling.

HANDLE AS ROUTINE OFFICE VISIT:

- 8a) Ask patient if the NYC Health Department has been speaking with him/her daily about his/her temperature and symptoms.
- 8b) If "Yes," continue with usual triage, assessment and scheduling.
- 8c) If "No,"
- 8d) Obtain patient name, date of birth, current address, current phone number(s), West African country traveled from and dates of travel.
- 8e) Tell patient that the Health Department will contact him/her to monitor for fever and symptoms for 21 days after last exposure.
- 8f) Call the Health Department Provider Access Line at 1-800-492-3641 to enroll the patient in active monitoring.
- 8g) Continue with usual triage, assessment and scheduling.

TAKE ACTION AND INFORM

Patient may meet criteria for Person Under Investigation for Ebola:

- A.) Obtain patient name, date of birth, current address, current phone number(s), current location, date of symptom onset, West African country patient traveled from and dates of travel.
- B.) If an emergency system is available, call your facility should call 911. Tell 911 about illness and travel history.
- C.) If not an emergency, tell the patient the following:
 1. Stay in current location. Do not take public transportation.
 2. Minimize exposure of body fluids to household members or others nearby.
 3. A Health Department physician will contact the patient.
- D.) Immediately call the Health Department Provider Access Line at 1-800-492-3641 (1-800-NYC-6096) to report a patient with possible Ebola. Do this even if you are uncertain.

More information on Ebola
[Visit nyc.gov/ebola](http://www.nyc.gov/ebola) or toll-free [1-800-492-3641](http://www.nyc.gov/ebola)

Updated January 22, 2013

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Identifying Patients with Possible Ebola Virus Disease in Ambulatory Care Settings Triage in Clinical Settings

The vast majority of febrile patients in ambulatory settings do not have Ebola, and the risk posed by an Ebola patient with early, limited symptoms is lower than that of a patient hospitalized with severe disease. Still, because early Ebola symptoms mirror other febrile illnesses, triage and evaluation should account for the possibility of Ebola.

IDENTIFY

Ask about:
(1) Travel and exposure history: "Have you traveled to an Ebola affected country* or had contact with a confirmed Ebola case in the 21 days before you started to feel sick?"

NO

NO RISK FOR EBOLA:
Continue with usual triage, assessment and scheduling.

YES

*Unilateral transmission of Ebola virus disease is occurring in the West African countries of Guinea, Liberia and Sierra Leone. Other countries may occasionally have limited transmission in settings with unreported control measures. See the CDC website for the most recent information: <http://www.cdc.gov/eid/content/vol21/16/2116a11a11.htm>

Ask about:
(2) Signs and symptoms: "Do you have fever (subjective or measured) or headache, weakness, muscle pain, vomiting, diarrhea, abdominal pain or unexplained bleeding?"

NO

HANDLE AS ROUTINE OFFICE VISIT:

- 8a) Ask patient if the NYC Health Department has been speaking with him/her daily about his/her temperature and symptoms.
- 8b) If "Yes," continue with usual triage, assessment and scheduling.
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YES

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HANDLE AS ROUTINE OFFICE VISIT:

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- 8g) Continue with usual triage, assessment and scheduling.

ISOLATE

Patient may meet criteria for Person Under Investigation for Ebola. Isolate patient immediately. Avoid unnecessary contact.

- A.) Immediately place patient in private room with closed door, preferably with a bathroom or covered commode.
- B.) No one should have direct contact with a Person Under Investigation for Ebola without wearing appropriate personal protective equipment (PPE). (Details below).
- C.) Put one person in charge of overseeing which staff have contact with the patient.
- D.) Minimize number of staff interacting with patient. Do not perform phlebotomy, and do not give subcutaneous treatments.
- E.) Do not refer patients to Emergency Department, hospital, or other facility without consulting the Health Department.
- F.) If patient is exhibiting obvious bleeding, vomiting or copious diarrhea, call 911. Do not re-enter rooms until appropriately protected (EM) personnel arrive.

INFORM

Inform NYC Health Department immediately by calling the Provider Access Line, 1-800-492-3641.

A.) Be prepared to:

1. Provide patient's name, date of birth, address, phone, date of symptom onset, West African country traveled from and dates of travel.
2. Describe patient's travel history and exposures that put him/her at risk for Ebola.
3. Describe patient's symptoms, signs and duration of illness.

B.) The Health Department will:

1. Consult with you about need to transport the individual.
2. Help arrange transport to another medical facility, if needed, and make related notifications.

C.) Do NOT transfer patient without telling the Health Department.

D.) Consult with Health Department before cleaning or disinfecting room or equipment used on patient.

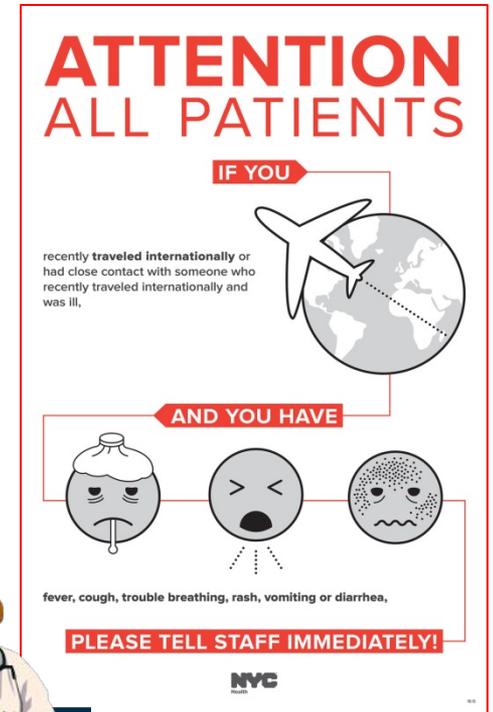
Personal Protective Equipment (PPE) in the Ambulatory Care Setting

Persons should have direct contact with a Person Under Investigation for Ebola without wearing appropriate PPE.

- A.) If PPE is available and direct patient contact is necessary, a single staff member should be present during and removal of PPE should be organized to interact with the Person Under Investigation for Ebola.
- B.) In a minimum, health care workers should use the following PPE before direct patient contact: face shield and goggles, face mask, impermeable gown and two pairs of gloves.
- C.) The assigned staff member should refrain from direct interaction with other staff and patients in the care setting until PPE has been safely removed in a designated area and hand hygiene performed. Remove supplies of safe cleaning and removal of PPE. <http://www.nyc.gov/ebola>

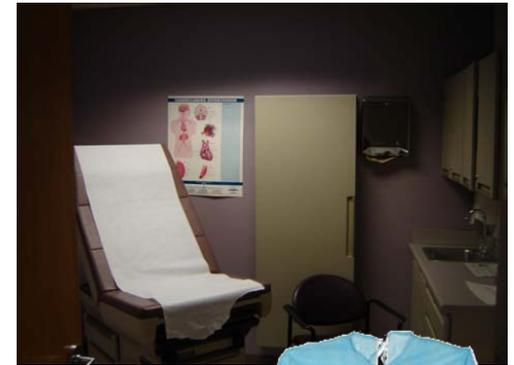
Trends Identified: Identify

- All sites visited have protocols for screening for travel history and symptoms.
- Signage Posted
- Provider & Back-up Provider designated to evaluate PUI



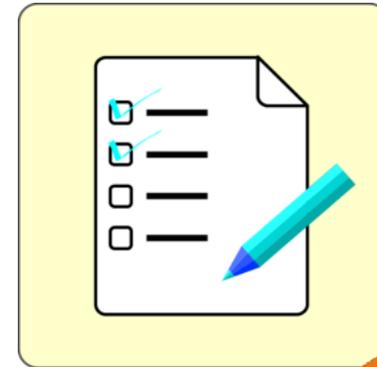
Trends Identified: Isolate

- Sites visited have identified Isolation Rooms with handwashing facilities; **most observed with access to restroom or covered commode.**
- Routes Identified to/from isolation
- Donning/Doffing Areas Identified
- Recommended PPE Available On-site



Trends Identified: Inform

- All sites visited have protocols for internal Communication and DOHMH Notification
- DOHMH Provider Access Line Posted
- Documentation Protocols for potential exposure



1-866-NYC-DOH1 (692-3641)

Trends Identified : Training

- Screening and Isolation Protocols
- Screening and Isolation Drills
- Donning and doffing of PPE
 - monthly training ongoing
 - training once or twice



Gaps Identified

- PCC staff members have limited access to hands-on training opportunities for donning and doffing PPE.
- Increased frequency of staff trainings and drills on screening and isolation protocols is needed.
- Additional PPE supplies are needed to practice donning and doffing.
- Increased awareness of the Primary Care Center's role in identifying and notifying DOHMH to enroll individuals in active monitoring is needed.

PCEPN Recommendations

- Increase hands-on PPE training opportunities for Primary Care providers
- Provide Primary Care Centers with guidance on developing screening and isolation tools.
- Assist Primary Care Centers with conducting screening and isolation drills.
- Increase/enhance messaging to Primary Care Centers to clarify DOHMH expectations through a series of regular member communications.

Questions?



Mystery Patient Drill Project

Mystery Patient Drill Project

Purpose: To assist PCCs in the development of internal protocols and exercises procedures for the rapid recognition and isolation of patients with highly communicable diseases.



Project Participants

In 2015, Mystery Patient Drills were carried out at 21 distinct primary care centers (sites) operated by 19 primary care networks (organizations) in NYC.

In 2016, Mystery Patient Drills were carried out at 15 distinct primary care centers (sites/organizations) in NYC.

PCEPN Resources Provided

■ Informational Webinars

- Project Introduction
- Screening and Isolation Protocol Development
- Exercise Planning & Roles

Mystery Patient Drill Kit:

- Exercise Plan
- Master Event Scenario List (MSEL)
- Exercise Evaluation Guide(EEG)
- Participant Feedback Forms
- Hotwash Guide
- After Action Report(AAR) Template

Technical Assistance to review and revise existing protocols.



Mystery Patient Drills

Scenario: A potentially infectious patient presenting with influenza-like illness (ILI) at a primary care center. Patient is accompanied by a friend/family member.



Objective: Assess the ability of the primary care center to appropriately screen and isolate a potentially infectious patient.

Exercise Roles

- Controller/Evaluators (PCEPN Liaison)
- Site Controller & Evaluators (PCEPN and On-Site Drill Team)
- Mystery Patient Actor (Volunteer)
- Participants/Players (Primary Care Center staff)



Pre-Drill Activities

- Participating Primary Care Centers designated an on-site drill team to coordinate drill Logistics (date, time, location)
- Drill Teams were provided with informational webinars and Drill Kit Documents
- Drill Teams met with PCEPN prior to the unannounced drill at a location outside the center



On-Site Drills

- PCEPN Staff member and Mystery Patient Actor enter site and report to front desk for a walk-in appointment
- Upon screening, mystery patient discloses symptoms (Fever and respiratory symptoms or rash)
- Upon identification and isolation by staff, drill concludes
- PCEPN conducts hotwash (debrief) with participants and on-site Drill Team and collects feedback forms



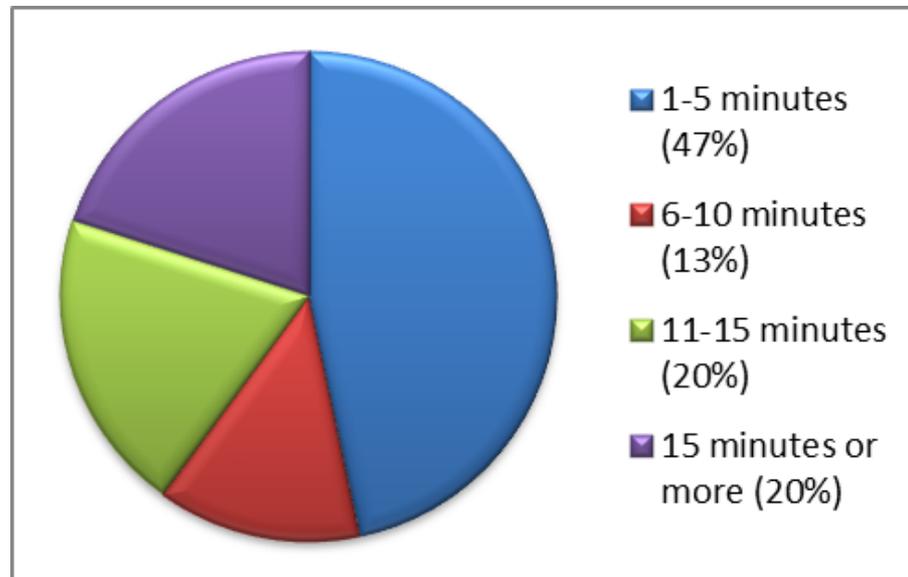
Post-Drill Activities

- Each participating primary care center completed an After Action Report (AAR) using the template provided
- AARs were submitted to PCEPN
- Completed AARs, EEGs, and participant feedback forms were used to compile a master AAR



Key Findings (2015)

- Average waiting time between initial entry and triage (patient escorted to evaluation/isolation area) was 8.5 minutes.



Key Findings (2015)

- In almost half of the drills conducted, the mystery patient was offered a mask by the first point of contact.
- In 19 of the drills conducted, the patient's disposition after triage was to be held in the isolation area until further evaluation by a medical provider.



2015 AAR Results: Screening

Strengths Observed:

- Established protocols for patient screening.
- Staff members have been trained to screen patients for symptoms of infectious disease.
- Awareness of screening requirements and infection control processes supported by informing patients and placing signage in common areas.



2015 AAR Results: Screening



Improvement Areas Observed:

- Screening of potentially infectious patients not consistently performed by the first point of contact
- Potentially infectious patients that are not screened (or given a mask) by first point of contact present increased exposure risk to staff and patients in common areas.

2015 AAR Results: Isolation

Strengths Observed:

- Established protocols for patient isolation.
- Staff members have been trained to isolate patients with a positive screening for infectious disease.
- Ongoing communication among staff members supports the prompt isolation of patients upon identification and/or screening.
- Identified isolation rooms, PPE, and infection control requirements for patients placed in isolation.



2015 AAR Results: Isolation



Improvement Areas Observed:

- Awareness of isolation precautions/ requirements including consistent use of masks for patients and staff.
- Inconsistent hand hygiene by PCC staff members and patients in isolation.
- Incomplete patient information collected during initial entry to isolation room.

Protocol Checklist & Follow-up

As part of the AAR developed in 2015, PCEPN developed a checklist to assist participating primary care centers in the review of current screening and isolation protocols.



After the project, many participating primary care centers have continued to perform Mystery Patient Drills utilizing the tools and support provided.

Questions?



Role Play Activity

We need 2 volunteers to participate in a mock “Mystery Patient Drill”



Next Steps

- PCEPN continues to work with DOHMH to identify and develop training opportunities for the primary care centers
 - **PPE Trainings for Primary Care Providers**
 - 4/18, 4/26, & 4/28
 - **Respiratory Protection Webinar & Fit-Testing Workshop**
 - 5/12 & 5/25
- All primary care centers are invited to access the available resources:
<http://www.pcepn.org/#!mystery-pt-drill/octe3>
- Mystery Patient Project Phase III– PCEPN will begin recruitment late 2016

Final Questions...





Contact us:
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