



# **Screening and Isolation for Highly Communicable Diseases**

## **Essential Staff Training**

# Background

- ▶ Preparing frontline health workers is critical to protecting New Yorkers against threats of all types.
- ▶ This training is designed to provide you with an overview of recommendations for protection of healthcare facility staff and patients from transmission of severe communicable diseases such as Ebola.
- ▶ Training is supplemented by no notice drills to identify strengths and opportunities for improvement

# Background : Continued



- ▶ Who should complete this training:
  - Emergency department staff
  - Security staff
  - Registration staff
  - Triage staff
  - Physician and nursing administration responsible for these patient care areas
  - Anyone who has public and patient contact in hospital emergency departments

# Introduction



- ▶ Severe communicable diseases pose a potential threat to the New York City healthcare system
- ▶ In an increasingly connected world, new infections can easily be introduced by international travel
- ▶ Recent examples: Severe Acute Respiratory Syndrome (SARS); Middle East Respiratory Syndrome (MERS-CoV); measles and Ebola virus disease

# Introduction: Continued



- ▶ Emergency Departments are important and vulnerable points of entry
- ▶ Rapid *identification, isolation and management* of patients with highly communicable diseases prevents spread of illness to other patients, staff and visitors and can have a great impact on protecting public health

# Training Objectives



- ▶ To enhance understanding of the general process for rapid recognition of a patient who may have a communicable disease of public health concern upon arrival at an Emergency Department
- ▶ To familiarize staff with infection control measures that can minimize potential transmission: identify, isolate and inform
- ▶ Intended to supplement, not replace, facility specific policies, plans and training

# Key Concept: 3 I's



## Identify

Maintain awareness of current outbreaks  
Visible signage: travel  
Triage questions: key signs and symptoms  
Fever + rash  
• OR  
Fever + travel to outbreak area  
• OR  
Fever + respiratory symptoms with either healthcare related exposures or as part of a cluster of two or more persons with similar symptoms

## Isolate

Patients who screen positive for potential communicable disease should be immediately masked, separated from others and placed in an isolation room

Apply appropriate precautions

Appropriate staff Personal Protective Equipment should be worn

## Inform

Following clinical evaluation, suspected communicable diseases should be reported to Infection Control and the NYC DOHMH

1-866-NYC-DOH1  
1-866-692-3641

Maintain a log of all staff contact

Provide appropriate laboratory testing and patient care based on facility protocols and NYC DOHMH recommendations.

# Identify



- ▶ Initial patient identification
  - Signs and Symptoms
    - Fever? → if yes
      - Do they have a rash?
      - Do they have respiratory symptoms (e.g. cough)?
  - Travel history
    - Personal travel outside country or contact with individual having traveled outside country within the last 3 weeks

FIND OUT: What is your organization notification process for updates on current outbreaks, travel advisories or emerging infections?

# Identify: Signs and Symptoms



- ▶ Triage and screening staff should always screen for symptoms of a potential communicable disease:
  - Fever (presentation or self report) with:
    - Cough, shortness of breath, trouble breathing  
*and/or*
    - Rash or skin lesions

# Identify: Travel History



- ▶ Facilities should post visible signage in multiple languages instructing patients with fever/respiratory symptoms/rash to report to registration/triage and report symptoms
- ▶ Signage should use simple messages to direct patients with these symptoms who have traveled out of the United States in the past 3 weeks to report to registration/triage

FIND OUT: Where are signs posted at your facility?

# Identify: Travel History



- ▶ The following question should be asked of all patients with fever at initial screening:
  - “In the past three weeks have you traveled outside the United States or had close contact with someone who traveled outside the United States”

FIND OUT: Who is responsible for asking this question at your facility?

# Identify: Risk Factors



- ▶ Other risk factors to consider
  - Healthcare exposures
  - In an area with a current outbreak
  - Exposure to other people with similar symptoms

BE AWARE: Maintain awareness of current significant outbreaks through NYC DOHMH and the Centers for Disease Control and Prevention

# Identify: Summary



- ▶ Positive screening criteria include:
  - Fever + rash
    - OR
  - Fever + travel to outbreak area
    - OR
  - Fever + respiratory symptoms with either healthcare related exposures or as part of a cluster of two or more persons with similar symptoms

# Isolate



- ▶ Patients who are identified as at risk based on signs, symptoms and/or travel history should:
  - Be given a surgical mask for source control
  - Perform hand hygiene
  - Be separated and placed in an Airborne Infection Isolation Room (negative pressure) or private room with door closed
- ▶ Triage staff should also perform hand hygiene

BE AWARE: Know locations of isolation rooms and personal protective equipment

# Isolate: Personal Protection



- ▶ The number of staff entering the patient's room should be limited to essential staff and public health personnel
- ▶ Standard, droplet, airborne, and contact precautions should be followed
- ▶ Hospital policy and procedures for use and disposal of Personal Protective Equipment (PPE) should be followed

FIND OUT: More about your Hospital PPE policies and procedures

# Standard Precautions: Hand Hygiene



- ▶ Perform hand hygiene by means of handwash with soap and water or handrub with alcohol based product

## How to Handwash



## How to Handrub



# Standard Precautions: Personal protective equipment (PPE)



- ▶ Assess the risk of exposure to body substances or contaminated surfaces BEFORE any health-care activity
- ▶ Select PPE based on the assessment of risk:
  - clean non-sterile gloves
  - clean, non-sterile fluid-resistant gown
  - mask and eye protection or a face shield

# Standard Precautions: Respiratory hygiene and cough etiquette



- ▶ Covering mouth and nose when coughing or sneezing
- ▶ Hand hygiene after contact with respiratory secretions.
- ▶ Spatial separation of persons with acute febrile respiratory symptoms

Stop the spread of germs that make you and others sick!

## Cover your Cough

Cover your mouth and nose with a tissue when you cough or sneeze or cough or sneeze into your upper sleeve, not your hands.

Put your used tissue in the waste basket.

You may be asked to put on a surgical mask to protect others.

Clean your Hands after coughing or sneezing.

Wash hands with soap and warm water for 20 seconds or clean with alcohol-based hand cleaner.

# Isolate: Contact Precautions



- ▶ Contact Precautions apply where the presence of excessive wound drainage, inability to control stool, or other discharges from the body suggest an increased potential for extensive environmental contamination and risk of transmission
- ▶ A single-patient room is preferred for patients who require Contact Precautions
- ▶ Healthcare personnel caring for patients on Contact Precautions wear a gown and gloves for all interactions that may involve contact with the patient or potentially contaminated areas in the patient's environment
- ▶ Donning PPE upon room entry and discarding before exiting the patient room is done to contain pathogens

# Isolate: Droplet Precautions



- ▶ Intended to prevent transmission of pathogens spread through close respiratory or mucous membrane contact
- ▶ A single patient room is preferred for patients who require Droplet Precautions.
- ▶ Healthcare personnel wear a mask (a respirator is not necessary) for close contact\* with infectious patient; the mask is generally donned upon room entry.
- ▶ Patients on Droplet Precautions who must be transported outside of the room should wear a mask if tolerated and follow Respiratory Hygiene/Cough Etiquette.

\*Close contact is generally defined as in a closed space or within 3 feet of the patient

# Isolate: Airborne Precautions



- ▶ Prevent transmission of infectious agents that remain infectious over long distances when suspended in the air (e.g., rubeola virus [measles], varicella virus [chickenpox], M. tuberculosis, and possibly SARS)
- ▶ The preferred placement for patients who require Airborne Precautions is in an airborne infection isolation room (AIIR). An AIIR is a single-patient room that is equipped with special air handling and ventilation capacity
- ▶ Healthcare personnel caring for patients on Airborne Precautions wear a mask or respirator, depending on the disease-specific recommendations donned prior to room entry

# Isolate: Summary of Precautions for Special Respiratory Pathogens



- ▶ Middle East respiratory syndrome coronavirus (MERS-CoV), Severe Acute Respiratory Syndrome, Ebola Virus Disease, Syndrome (SARS), novel Influenza (e.g. bird flu) are examples of highly communicable diseases requiring enhanced infection control precautions
  - Standard
  - Contact
  - Airborne precautions
    - Face shield

# Isolate: Special Rash Pathogens



- ▶ Measles
  - Airborne isolation
  - If no airborne room available → isolate and room must remain empty 2 hours after vacated
- ▶ Chicken pox (Varicella) or Zoster
  - Airborne isolation + Contact precautions
- ▶ Meningitis
  - Droplet + contact precautions

# Inform



- ▶ Once triage staff has identified a patient with a positive highly communicable disease screening → Notify
  - Triage staff should promptly notify ED leadership
  - ED leadership should identify a physician to conduct initial patient clinical assessment using appropriate PPE

# Inform: Internal Notification



- ▶ The following positions within the hospital may need to be notified of a patient with suspected communicable disease
  - ED Administration Supervisor
  - Infectious Disease / Infection Control
  - Hospital Administrator on Duty
  - Nursing Head
  - Housekeeping
  - Security

FIND OUT: who will be notified at your facility

# Inform: External Notification



- ▶ Once determined a patient has suspected communicable disease of public health concern it is essential the Infection Control Practitioner and/or his/her designee notify NYC DOHMH: Provider Access Line:
  - 1-866-NYC-DOH1  
(692-3641)
- ▶ Maintain a log of the names and contact information of all staff in contact with patient
- ▶ Provide appropriate laboratory testing and treatment based on the clinical evaluation and NYC DOHMH recommendations

# Remember



- ▶ We are only as strong as our weakest link
  - Know what to look for
  - Know the protocols
  - Communication is key
- \*When in doubt → Seek additional information

# Review:



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# More information



- ▶ NYC DOHMH Health Alerts (NYCMED)
  - <https://a816-healthpsi.nyc.gov/NYCMED/Account/Login>
- ▶ CDC Health Alert Network
  - <http://emergency.cdc.gov/han/index.asp>
- ▶ CDC Travel Notices
  - <http://wwwnc.cdc.gov/travel/notices>
- ▶ CDC Outbreaks and Incidents
  - <http://emergency.cdc.gov/recentincidents/index.asp>
- ▶ World Health Organization Media Center
  - <https://a816-healthpsi.nyc.gov/NYCMED/Account/Login>

Please download the course Additional References for tools and job action sheets