Ebola Virus Disease West Africa, 2014

Preparing for and Responding to Potential Cases in NYC

New York City Department of Health
and Mental Hygiene

Note: Information contained in these slides is constantly changing and updated every Friday

Presentation Overview

- Ebola virus
- Reservoir and Transmission
- Clinical Features
- 2014 Outbreak
- NYC Public Health Response
- Screening and Management of Suspect Cases
- Key Messages

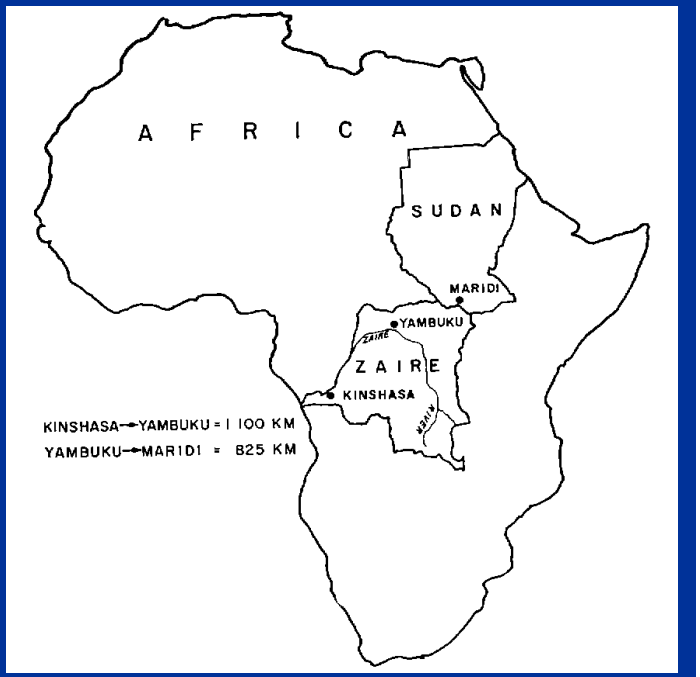
Ebola virus

November 21, 2014

THE NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE

Ebola Virus

- Family of zoonotic enveloped RNA viruses
  - Filoviridae
- Ebola virus discovered in 1976 near the Ebola River in what is now the Democratic Republic of Congo (Ebola Zaire), and simultaneously in Sudan (Ebola Sudan)



Ebola Virus

- Five Ebolavirus species; 5 different case fatality rates (CFR)
  - Zaire: CFR generally 60-90%
    - Current outbreak strain – Reported CFR 50-90%
  - Sudan: CFR 40-60%
  - Taï Forest - formerly called Ivory Coast
  - Bundibugyo: CFR 25%
  - Reston - not generally found in humans; infected individuals are asymptomatic

Transmission of Ebola

November 21, 2014

Reservoir and Transmission

- Unclear reservoir, possibly fruit bats
- Infection of chimpanzees, gorillas, forest antelopes, porcupines
- Humans: handle and eat uncooked bush meat (bats, chimpanzees, gorillas)
- Infected humans transmit from person to person

Ebola Transmission

- Direct contact (broken skin or unprotected mucous membranes) with a sick person's blood or other bodily fluids (e.g., urine, saliva, feces, vomit, or semen)
- Percutaneous contact with contaminated objects (e.g., needle-stick) or infected animals (e.g., handling of bushmeat)
- Not contagious until symptoms appear
- Not airborne

Ebola Transmission
Household Contacts

- No infection control precautions
- 173 household contacts of 27 patients: transmission rate: 16%
  - Of 78 household contacts reporting no physical contact with patients, none were infected
  - Of 95 persons with direct physical contact, 27 (28%) became infected
- Risk highest after contact with patients' blood

Dowell SF, Mukunu R, Ksiazek TG, Khan AS, Rollin PE, Peters CJ. Transmission of Ebola hemorrhagic fever: a study of risk factors in family members, Kikwit, Democratic Republic of the Congo, 1995. Commission de Lutte contre les Epide´mies a` Kikwit. J Infect Dis. 1999;179 Suppl 1:S87-91.

Clinical and Environmental Sample Testing

- 54 clinical specimens from 26 Ebola cases
  - Virus found in 16 specimens, including saliva, stool, semen, breast milk, tears, blood, and skin swabs
- 33 environmental samples –None positive
  - Stethoscope, bed frame, chair, food bowl, spit bowl, floor, IV tubing, skin of 3 attendants
- Only 2 extracorporeal specimens positive
  - MD's blood-stained glove
  - Bloody IV insertion site on patient

Bausch DG, Towner JS, Dowell SF, Kaducu F, Lukwiya M, Sanchez A, et al. Assessment of the risk of Ebola virus transmission from bodily fluids and fomites. J Infect Dis. 2007;196 Suppl 2:S142-7.

Ebola Transmission – Hospitals

South Africa: demonstration of effectiveness of current recommendations

- Anesthetic assistant diagnosed with Ebola 12 days after unrecognized index case was hospitalized
- > 300 health care personnel exposed to assistant and index case, no nosocomial transmission with use of standard precautions

Richards GA, Murphy S, Jobson R, Mer M, Zinman C, Taylor R, et al. Unexpected Ebola virus in a tertiary setting: clinical and epidemiologic aspects. Crit Care Med. 2000;28:240-4.

Ebola Transmission – Hospitals

- United States: Several previous viral hemorrhagic fever cases in US, initially unrecognized, no nosocomial transmission
- Nosocomial transmission in current outbreak likely occurring in settings with inadequate or no PPE

Clinical Features

Incubation period and Symptoms

- Incubation period: 8-10 days (range 2-21)
- Signs and Symptoms of Ebola Virus Disease (EVD)
  - Fever
  - Headache
  - Myalgias
  - Nausea and vomiting
  - Diarrhea
  - Abdominal pain
  - Bleeding, unexplained hemorrhage
  - Macular erythematous eruption, eventual desquamation

Clinical Course

- Abrupt onset of symptoms
  - Non-specific – including fever, chills, myalgias
- GI symptoms often develop soon afterward
  - Profuse watery diarrhea, nausea, vomiting, abd pain
- Bleeding manifestations may occur later, but are not universal
  - Petechiae, ecchymoses, oozing from venipuncture sites
  - Frank hemorrhage less common

Laboratory Findings

- Laboratory Findings
  - Leukopenia, subsequent neutrophilia
  - Thrombocytopenia
  - Increased AST and ALT (AST>>ALT)
  - Abnormal coagulation indices (DIC)
  - Proteinuria

Differential Diagnosis

- Vague clinical presentation necessitates broad differential diagnosis
- Consider
  - Malaria
  - Typhoid
  - Bacterial sepsis
  - Leptospirosis
  - Cholera
  - Shigellosis
  - Other viral hemorrhagic fevers (Lassa, yellow fever, dengue, etc.)

Treatment

- No cure, treat symptomatically
  - Fluid management is particularly important
- Several experimental vaccines in development
- Several experimental drugs - none proven to work in humans (good results in animal models); limited supplies
- Convalescent serum used with unknown success rate

Investigational Therapy

Feldmann H, Geisbert TW. Ebola haemorrhagic fever. *Lancet* 2011; 377: 849–62.
Published **Online** November 16, 2010
DOI:10.1016/S0140-6736(10)60667-8

	Success in animals	Issues and concerns
Treatment approach		
Antibody therapy	Efficacy in rodents but not in non-human primates	Escape mutants; genetic variability; antibody-dependent enhancement of infection
Antisense oligonucleotides		
Phosphorodiamidate morpholino oligonucleotides	Efficacy in rodents and non-human primates (latter prophylactic only)	Genetic variation; delivery
Small interfering RNAs	Efficacy in rodents and non-human primates	Genetic variation; delivery
Inflammatory modulators		
Type I interferons	Efficacy in rodents but not in non-human primates	Manipulation of immune system
S-adenosylhomocysteine hydrolase inhibitors	Efficacy in rodents but not in non-human primates	Manipulation of immune system
Coagulation modulators		
Heparin sulfate	Efficacy in humans questionable; not tested in animals	Manipulation of coagulation
Tissue factor pathway inhibitors	Not tested in rodents; partial protection in non-human primates	Manipulation of coagulation
Activated protein C	Not tested in rodents; partial protection in non-human primates	Manipulation of coagulation
Vaccination approach		
Postexposure vaccination		
Vesicular stomatitis virus	Efficacy in rodents and non-human primates	Efficacy dependent on filovirus species and time of treatment start
Pre-exposure vaccination		
Adenovirus type 5	Efficacy in rodents and non-human primates; one dose; clinical trials	Pre-existing immunity; high dose
Human parainfluenza virus type 3	Efficacy in rodents and non-human primates; two doses needed for non-human primates	Pre-existing immunity; safety (replication-competent)
Vesicular stomatitis virus	Efficacy in rodents and non-human primates; one dose	Safety (replication-competent)
Virus-like particles	Efficacy in rodents and non-human primates; three doses needed for non-human primates	Boost immunisation needed; production
Recombinant Ebola virus without VP35	Efficacy in rodents	Safety

Only approaches that have shown in-vivo efficacy have been listed.

Fatality and Recovery

- CFR: 50-90%
- Those who live >1 week more likely to survive
- Patients who recover develop strain-specific antibodies that last for at least 10 years (possibly longer)

Ebola 2014

November 21, 2014

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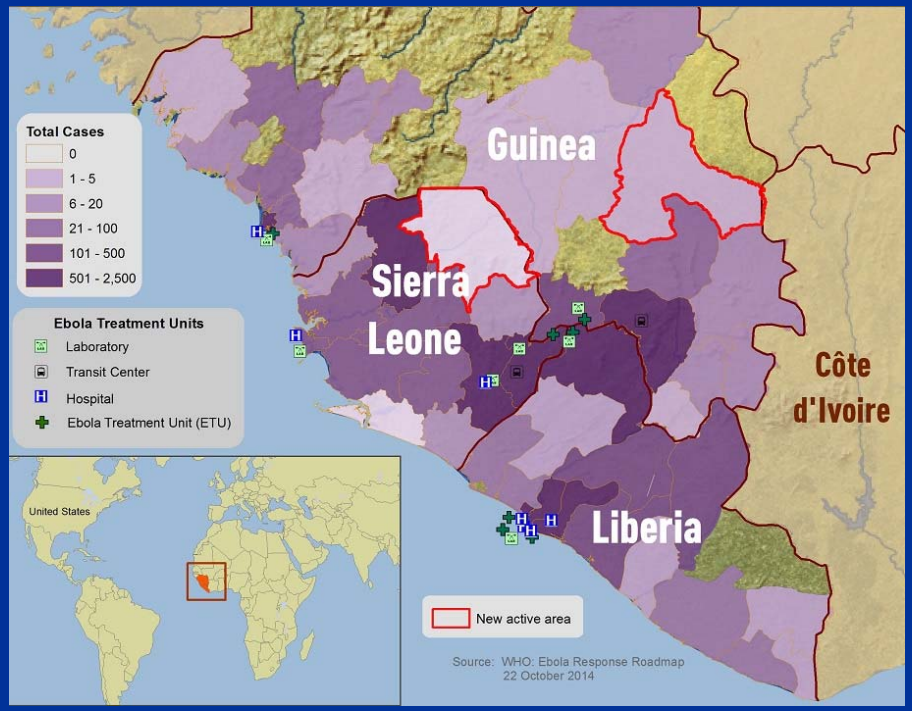
Ebola Outbreak: West Africa

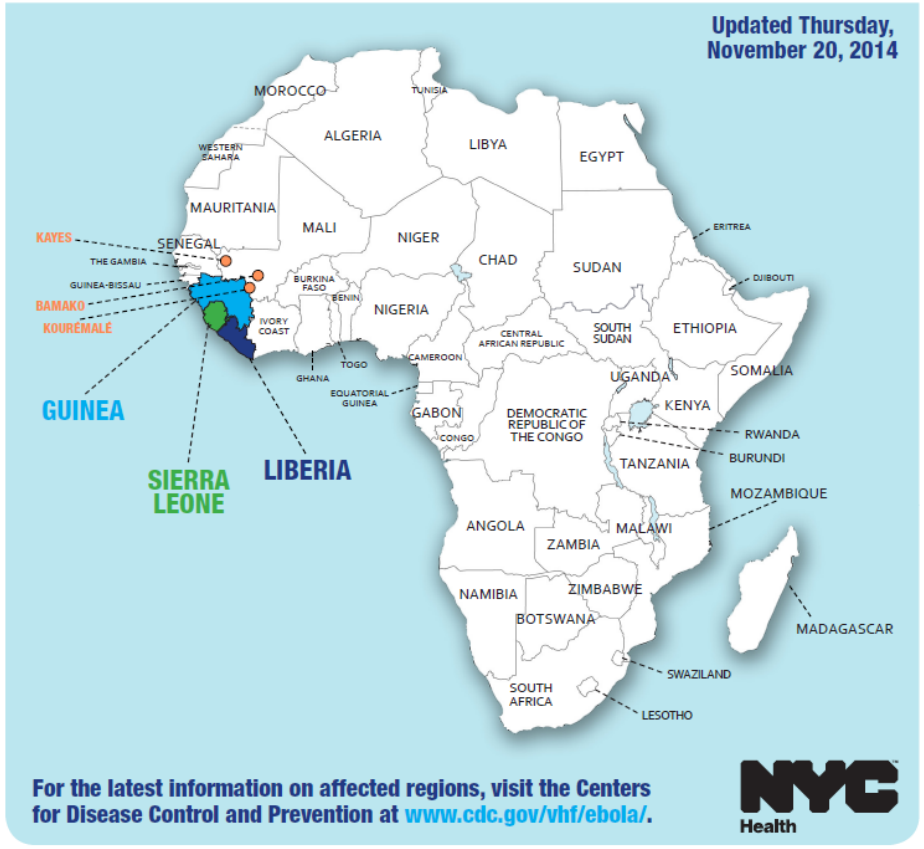


- This is the largest Ebola outbreak in history and the first in West Africa
- The outbreak continues to evolve, but local and international governments are taking steps to help

The latest map can be found on CDC's Ebola website: http://www.cdc.gov/vhf/ebola/resources/distribution-map-guinea-outbreak.html

Mapping the Ebola Outbreak in West Africa

- A large Ebola outbreak is now occurring in the West African countries of **Guinea**, **Liberia** and **Sierra Leone**. Currently, there also is limited transmission in **Mali** (Bamako, Kayes and Kourémalé are considered affected areas).
- People traveling to and from these countries could be at risk. Ask about recent travel activity and watch closely for symptoms.
- People who traveled to other countries in Africa are not at risk.



http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html#areas

Origins of current outbreak

- Initial (suspect) cases occurred in a family in Guéckédou, Guinea
- December 2013 / January 2014
- Spread to a number of HCWs and then among their family members
- January to March 2014: smoldering activity in West Africa
- Early summer: numbers increased at a greater rate in all 3 countries

Ebola 2014 Outbreak Cases & Deaths

(November 19, 2014)

- 15145 suspected or confirmed Ebola cases and 5420 deaths reported
  - Most from Liberia followed by Sierra Leone and Guinea
- Countries reporting cases with secondary transmission include Nigeria,*Spain, US and Mali
- Countries reporting imported cases but no local transmission include Senegal

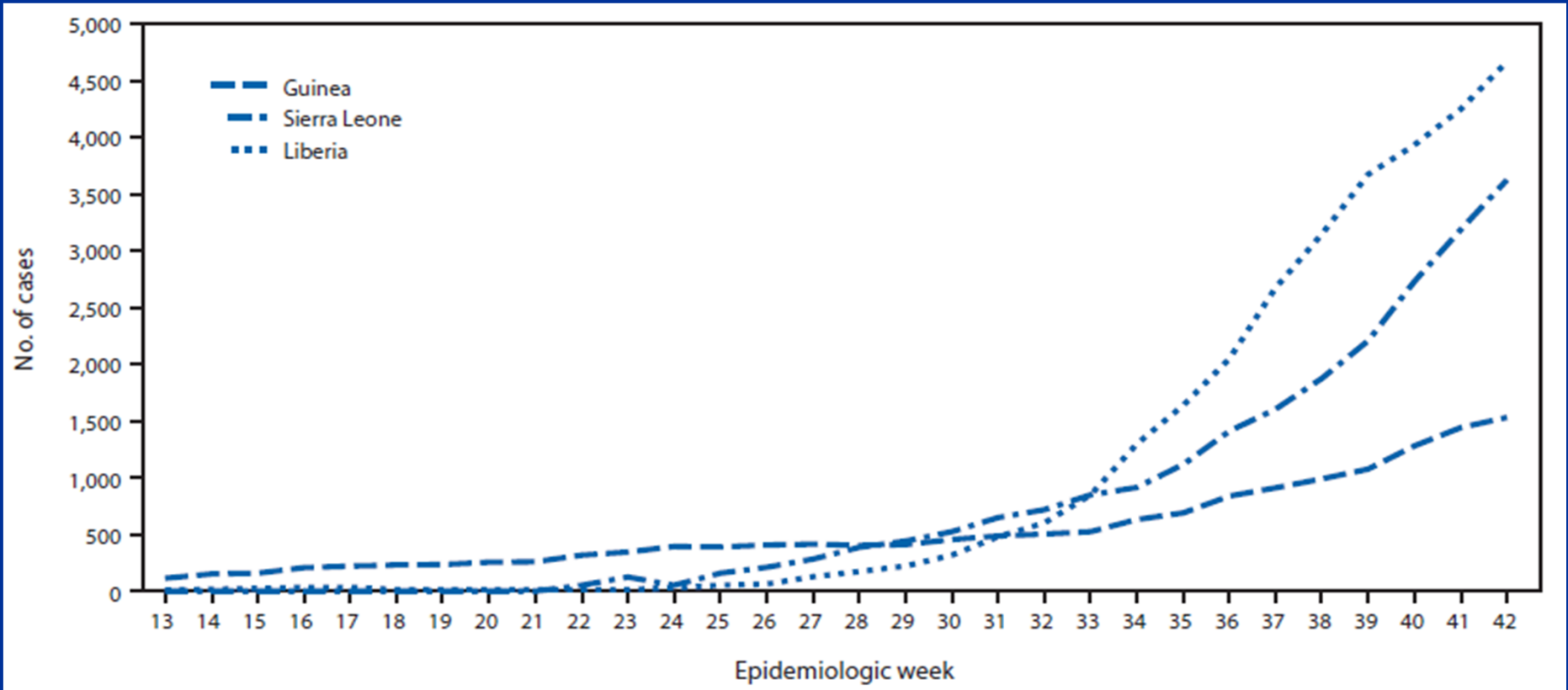
*Nigeria and Senegal are now designated Ebola-free by WHO

.*

Source: http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/case-counts.html

EVD Cases in West Africa

Cumulative number of Ebola virus disease cases reported, by epidemiologic week — three countries, West Africa, March 29–October 18, 2014



http://www.cdc.gov/mmwr/preview/mmwrhtml/mm63e1028a1.htm?s_cid=mm63e1028a1_w

Why is the outbreak so large in West Africa?

- Overwhelmed public health and health care systems
  - Lack of treatment hospitals, HCW PPE and medical supplies, limited contact tracing, lack of adequate isolation and quarantine
- Easy to cross borders; many people travel
- Sick persons not seeking care at hospitals
- Stigma
- Distrust of government and outsiders
- Lack of knowledge of disease and transmission
- Ritual burials

Goal of African Outbreak Response
STOP TRANSMISSION

- Patient Care
  - Experienced and/or trained staff
  - Strict use of personal protective equipment (PPE)
  - Able to work in physically and emotionally strenuous conditions
- Community education
  - Fact sheets, posters, pamphlets, radio spots, videos in local languages
- Stop human-to-human transmission
  - Case identification, contract tracing, infection control

Ebola Cases and Death: U.S.

- Cases transferred to the United States
  - Four health care workers (HCW) and one cameraman infected in West Africa transported to US hospitals
  - No deaths among these cases
- Four Ebola cases diagnosed in the US
  - Liberian man exposed to Ebola traveled to Dallas, TX
  - Two HCWs acquired disease from the Dallas case
  - NYC MD who treated EVD patients in Guinea
    - Treated and released from Bellevue Hospital Center

Public Health Response to Ebola in NYC

DOHMH Preparation and Response Measures

- Educate and prepare medical providers
- Work with hospitals and other groups to prepare for cases of Ebola
  - Guidance for health care providers and facilities
    - How to identify patients who could have Ebola
    - How to isolate and test suspect cases
    - How to protect HCWs
- Work with CDC, NYS DOH and other city agencies
- Test for Ebola at Public Health Laboratory (PHL)

DOHMH Outreach Measures

- Working with numerous West African immigrant communities
- Working with Community-Based Organizations serving these communities
- Developing educational materials
- Giving presentations in several languages
- Working with staff at airports
- Working with staff at EMS

Messaging to people in NYC

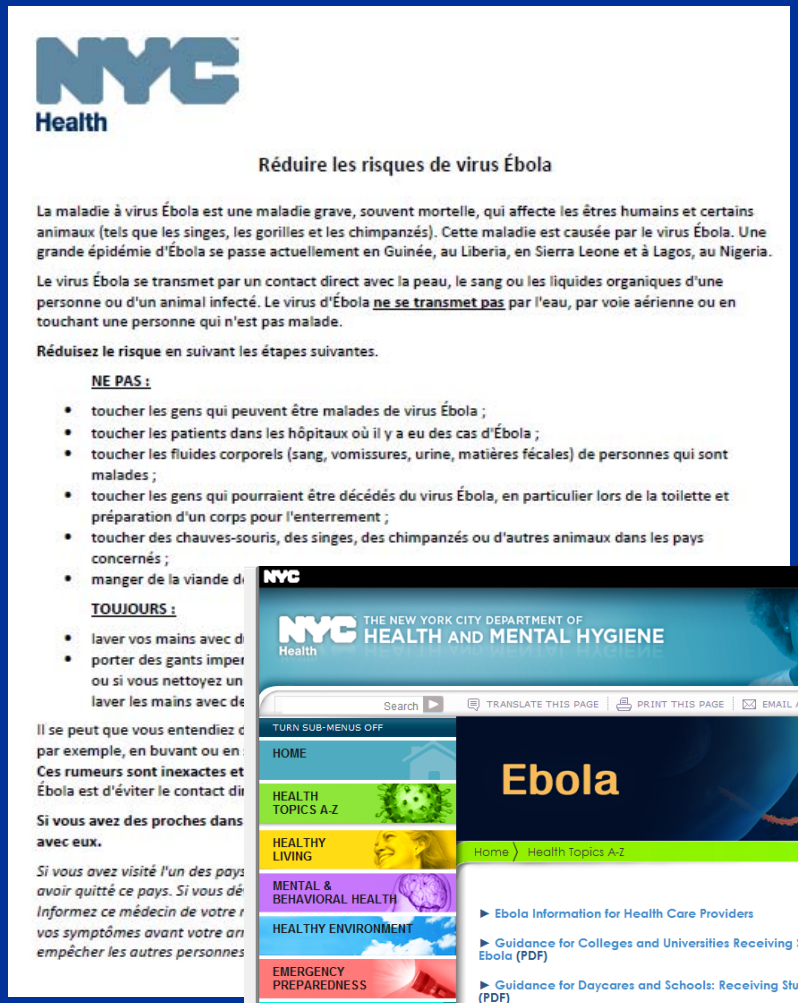
- If you have relatives or friends in West Africa – educate them on how to protect themselves
- If you know traveler who has arrived in last 21 days from an affected country – if person develops fever or symptoms consistent with Ebola, s/he should call 911 right away.
  - Immigration status will not be checked
  - People will be seen regardless of ability to pay

Minimizing Stigma

- Situation
  - Some Africans report feeling stigmatized as having intentionally and/or ignorantly spread Ebola.
  - Better understanding of disease transmission can help lessen fear and stigma.
- Solution
  - Acknowledge that Ebola is a human tragedy for us all. Focus on facts, science and what we know about the disease.
  - Reassure that in New York City, policies and people are in place to ensure that every patient receives quality and timely care.
- Fear and misinformation work against public health and could discourage those who are sick from seeking needed care.

Visit DOHMH or CDC websites for more information

www.nyc.gov/ebola www.cdc.gov



Réduire les risques de virus Ébola

La maladie à virus Ébola est une maladie grave, souvent mortelle, qui affecte les êtres humains et certains animaux (tels que les singes, les gorilles et les chimpanzés). Cette maladie est causée par le virus Ébola. Une grande épidémie d'Ébola se passe actuellement en Guinée, au Liberia, en Sierra Leone et à Lagos, au Nigeria.

Le virus Ébola se transmet par un contact direct avec la peau, le sang ou les liquides organiques d'une personne ou d'un animal infecté. Le virus d'Ébola ne se transmet pas par l'eau, par voie aérienne ou en touchant une personne qui n'est pas malade.

Réduisez le risque en suivant les étapes suivantes.

NE PAS :

- toucher les gens qui peuvent être malades de virus Ébola ;
- toucher les patients dans les hôpitaux où il y a eu des cas d'Ébola ;
- toucher les fluides corporels (sang, vomissures, urine, matières fécales) de personnes qui sont malades ;
- toucher les gens qui pourraient être décédés du virus Ébola, en particulier lors de la toilette et préparation d'un corps pour l'enterrement ;
- toucher des chauves-souris, des singes, des chimpanzés ou d'autres animaux dans les pays concernés ;
- manger de la viande d

TOUJOURS :

- laver vos mains avec d
- porter des gants imper
ou si vous nettoyez un
laver les mains avec de

Il se peut que vous entendiez d
par exemple, en buvant ou en
Ces rumeurs sont inexactes et
Ébola est d'éviter le contact di

Si vous avez des proches dans
avec eux.

Si vous avez visité l'un des pays
avoir quitté ce pays. Si vous dé
Informez ce médecin de votre r
vos symptômes avant votre arr
empêcher les autres personnes

EBOLA: AM I AT RISK?

Ebola is a severe, often fatal disease caused by a virus.
A large outbreak is now occurring in West Africa.

YOU CAN ONLY GET EBOLA FROM HAVING DIRECT CONTACT WITH ANOTHER SICK PERSON BY:

- Touching a person who is sick with Ebola.
- Touching a person who died from Ebola.
- Touching body fluids (blood, vomit, urine, feces) or objects soiled with the body fluids of a per

IF YOU VISITED A COUNTRY AFFECTED BY THE
DEVELOP A FEVER WITHIN 21 DAYS, SEEK MEDIC

- Alert the doctor's office or emergency room a
- Tell your doctor if you had direct contact with
might have had Ebola.

EBOLA: QUELS SONT LES RISQUES QUE JE COURS?

Ebola est une maladie grave, souvent mortelle, causée par un virus.
Une importante flambée frappe l'Afrique de l'Ouest actuellement.

VOUS POURRIEZ ÊTRE CONTAMINÉ PAR LE VIRUS EBOLA UNIQUEMENT SI VOUS AVEZ ÉTÉ EN CONTACT DIRECT AVEC UNE AUTRE PERSONNE INFECTÉE PAR LE VIRUS EB

- Toucher une personne qui est malade de la fièvre Ebola.
- Toucher une personne décédée de l'Ebola.
- Toucher des liquides organiques (le sang, vomissures, urine, matières fécales, ...) ou des objets souillés par les liquides organiques d'une personne malade avec la virus Ebola.

Vous ne POURRIEZ PAS être contaminé par le virus Ebola par l'air ou en étant simplement à côté d'une personne déjà infectée par le virus Ebola.

SI VOUS AVEZ VISITÉ UN PAYS AFFECTÉ PAR CETTE ÉPIDÉMIE ET SI VOUS AVEZ LA FIÈVRE DANS LES 21 JOURS SUIVANT, CONSULTEZ UN MÉDECIN DANS LES PLUS BREFS DÉLAIS.

- ALERTEZ le cabinet du médecin ou la salle d'urgence avant que vous y arriviez, et communiquez-leur tous les symptômes dont vous souffrez.
- Si vous avez été en contact direct avec une personne pouvant être infectée par le virus Ebola, dites-le à votre médecin.

SYMPTÔMES:

Le personnel de l'hôpital NE VOUS DEMANDERA PAS votre statut d'immigration. VOUS SEREZ VU par un médecin même si vous n'avez pas les moyens de payer la facture.

POUR EN SAVOIR PLUS, APPELEZ LE 311

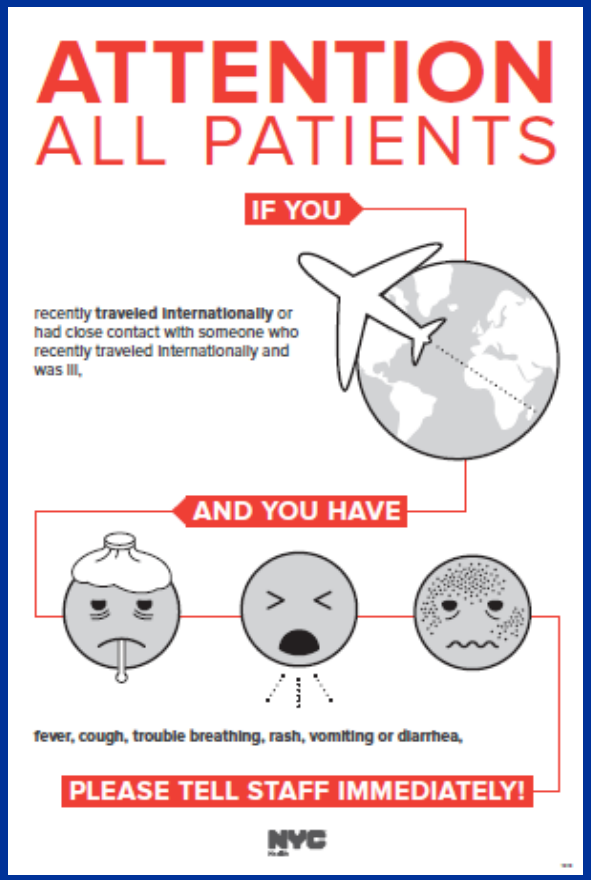
NYC

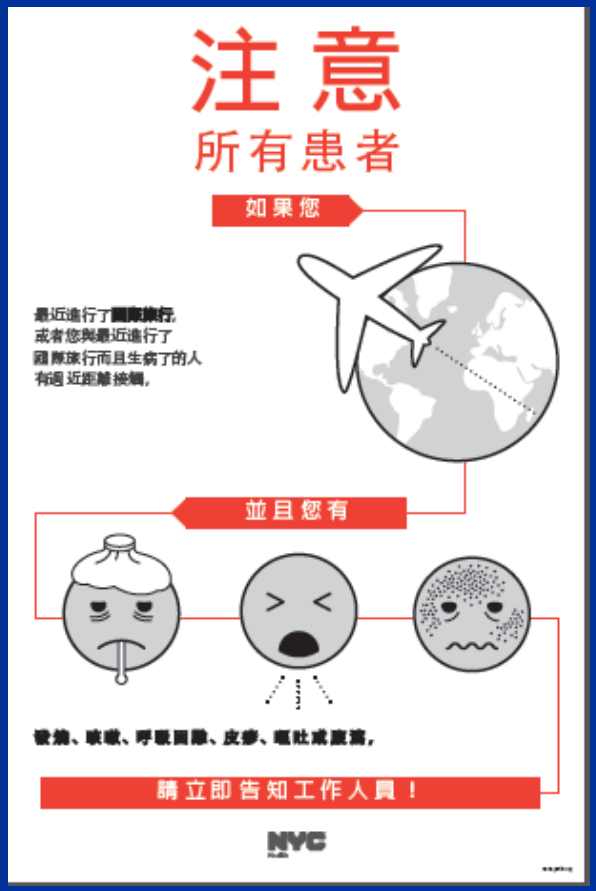
Provider and Health Care Facility Screening of Patients and Management of Suspect Cases

November 21, 2014

NYC Health
THE NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE


تنبيه
لجميع المرضى
إذا
سافرت خارج البلاد مؤخراً أو كان
لك اتصال مباشر بشخص سافر
خارج البلاد مؤخراً وكان مريضاً،
وأنت مصاب
بالحمى أو السعال أو ضيق التنفس أو الطفح الجلدي أو القيء أو الإسهال،
فيُرجى إخبار الفريق الطبي فوراً!
NYC


ATTENTION
ALL PATIENTS
IF YOU
recently traveled internationally or had close contact with someone who recently traveled internationally and was ill,
AND YOU HAVE
fever, cough, trouble breathing, rash, vomiting or diarrhea,
PLEASE TELL STAFF IMMEDIATELY!
NYC


注意
所有患者
如果您
最近進行了國際旅行,
或者您與最近進行了
國際旅行而且生病了的人
有過近距離接觸,
並且您有
發燒、咳嗽、呼吸困難、皮疹、嘔吐或腹瀉,
請立即告知工作人員!
NYC

Triage Procedures for Travel- Related Infections

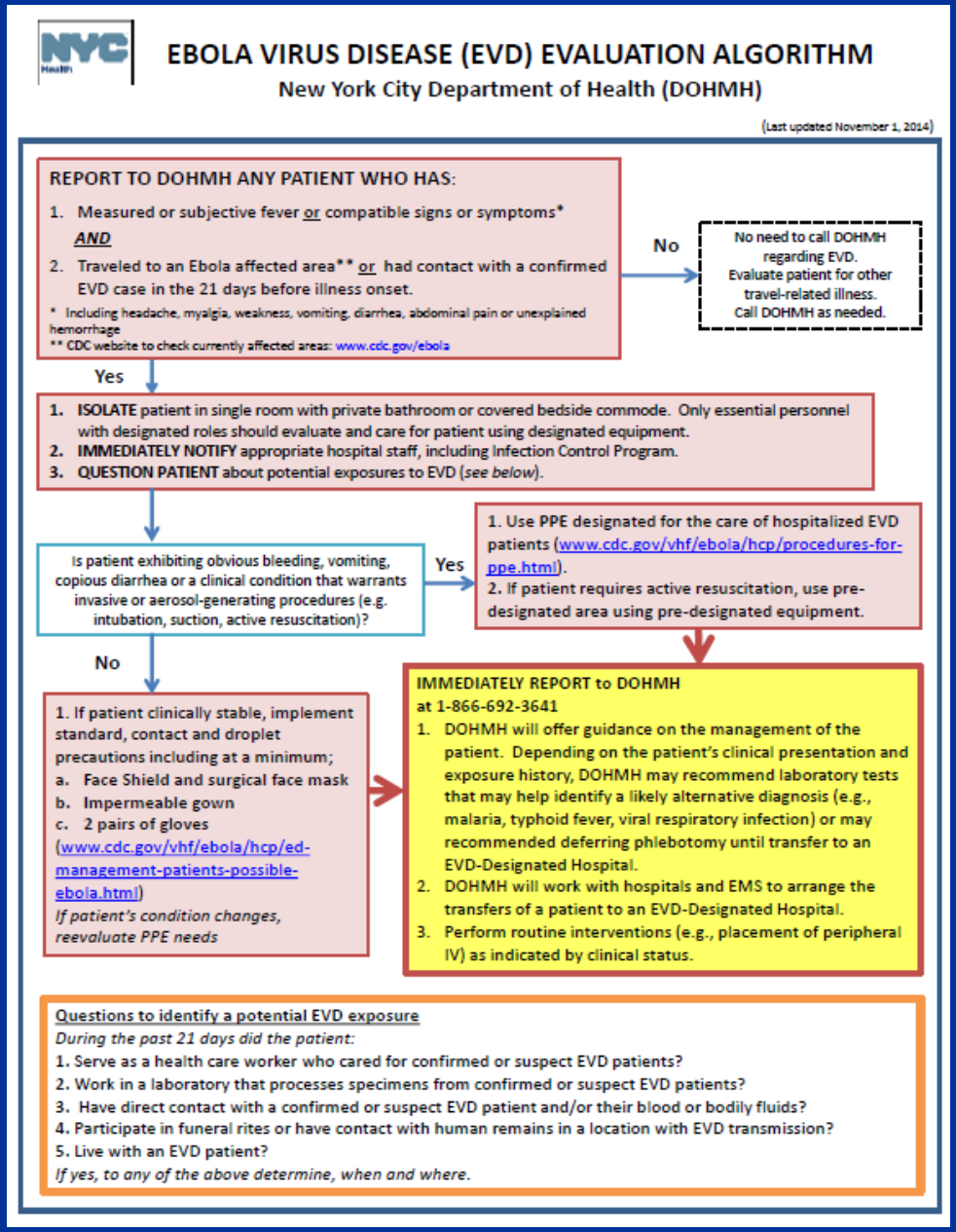
- Establish procedures to routinely and immediately ask patients with fever or compatible symptoms about recent travel
- If patient reports travel within past 21 days to an area with EVD transmission:
  - Place in private room w/ closed door
  - Implement standard, droplet and contact precautions
  - Notify appropriate facility staff, including Infection Control
  - Minimize number of staff who enter room
  - Interview patient re details on travel history and exposure to EVD while in West Africa

Initial Questions for Patients

- Household member of confirmed or suspected EVD pt?
- Participated in funeral rites or other exposure to human remains in EVD-affected area?
- Had contact with bodily fluids of known or suspected EVD case without appropriate PPE?
- Handled lab specimens of bodily fluids from confirmed or suspected EVD patient?
- HCW in facility treating confirmed or suspect EVD cases?
- Been within 3 feet of EVD patient or had brief physical contact when not wearing PPE?

Ebola Virus Disease (EVD) Evaluation Algorithm

http://www.nyc.gov/html/doh/downloads/pdf/cd/ebola-eval-algorithm.pdf



EBOLA VIRUS DISEASE (EVD) EVALUATION ALGORITHM

New York City Department of Health (DOHMH)

(Last updated November 1, 2014)

REPORT TO DOHMH ANY PATIENT WHO HAS:

1. Measured or subjective fever or compatible signs or symptoms*
   AND
2. Traveled to an Ebola affected area** or had contact with a confirmed EVD case in the 21 days before illness onset.

* Including headache, myalgia, weakness, vomiting, diarrhea, abdominal pain or unexplained hemorrhage

** CDC website to check currently affected areas: www.cdc.gov/ebola

No → No need to call DOHMH regarding EVD. Evaluate patient for other travel-related illness. Call DOHMH as needed.

Yes

1. **ISOLATE** patient in single room with private bathroom or covered bedside commode. Only essential personnel with designated roles should evaluate and care for patient using designated equipment.
2. **IMMEDIATELY NOTIFY** appropriate hospital staff, including Infection Control Program.
3. **QUESTION PATIENT** about potential exposures to EVD (*see below*).

Is patient exhibiting obvious bleeding, vomiting, copious diarrhea or a clinical condition that warrants invasive or aerosol-generating procedures (e.g. intubation, suction, active resuscitation)?

Yes → 1. Use PPE designated for the care of hospitalized EVD patients (www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html).
2. If patient requires active resuscitation, use pre-designated area using pre-designated equipment.

No →

1. If patient clinically stable, implement standard, contact and droplet precautions including at a minimum;
   a. Face Shield and surgical face mask
   b. Impermeable gown
   c. 2 pairs of gloves

(www.cdc.gov/vhf/ebola/hcp/ed-management-patients-possible-ebola.html)

If patient's condition changes, reevaluate PPE needs

IMMEDIATELY REPORT to DOHMH
at 1-866-692-3641

1. DOHMH will offer guidance on the management of the patient. Depending on the patient's clinical presentation and exposure history, DOHMH may recommend laboratory tests that may help identify a likely alternative diagnosis (e.g., malaria, typhoid fever, viral respiratory infection) or may recommended deferring phlebotomy until transfer to an EVD-Designated Hospital.
2. DOHMH will work with hospitals and EMS to arrange the transfers of a patient to an EVD-Designated Hospital.
3. Perform routine interventions (e.g., placement of peripheral IV) as indicated by clinical status.

Questions to identify a potential EVD exposure

During the past 21 days did the patient:

1. Serve as a health care worker who cared for confirmed or suspect EVD patients?
2. Work in a laboratory that processes specimens from confirmed or suspect EVD patients?
3. Have direct contact with a confirmed or suspect EVD patient and/or their blood or bodily fluids?
4. Participate in funeral rites or have contact with human remains in a location with EVD transmission?
5. Live with an EVD patient?

If yes, to any of the above determine, when and where.

Criteria for Reporting Suspect Cases to NYC DOHMH

Travel within 21 days before illness onset to an EVD outbreak affected area* and

- Fever (subjective or measured) or
- Compatible symptoms (e.g. headache, myalgias, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage)

Report to DOHMH

Provider Access Line

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

*as defined by CDC: Guinea, Liberia, Sierra Leone (list of affected countries may change)

Diagnostic Testing

- Reverse Transcriptase Polymerase Chain Reaction (RT-PCR)
  - Performed on blood (2 plastic purple top tubes)
  - Done at DOHMH Public Health Lab (Call DOHMH first)
- Enzyme Linked Immunosorbent Assay (ELISA)
  - Early and late Ebola antibodies
  - CDC-Atlanta only, Viral Special Pathogens Branch

Testing, Collection and Transport of Clinical Specimens

- Ebola virus detectable by PCR 3-10 days after illness onset
  - If < 3 days, may need to repeat testing to rule out EVD
- PHL will only accept specimens after approval by DOHMH medical epidemiologist (call DOHMH first)
  - Obtain 2 plastic purple top tubes, minimum volume 4 mL
  - PHL staff will travel to hospital, package specimen and transport to PHL
  - PCR test has 12 hour turn-around time
  - PHL will also send blood to CDC for confirmatory testing

Infection Control

- When evaluating a patient for EVD who is clinically stable, implement standard, contact and droplet precautions including at a minimum;
  - Face Shield and surgical face mask
  - Impermeable gown
  - 2 pairs of gloves
  - If patient's condition changes, reevaluate PPE needs
  - www.cdc.gov/vhf/ebola/hcp/ed-management-patients-possible-ebola.html
- For hospitalized confirmed or highly suspect patients, CDC has new detailed guidance on PPE use
  - http://www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html

Infection Control for Laboratories

- Refer to NYC/NYSDOH revised guidelines
- http://www.nyc.gov/html/doh/downloads/pdf/cd/ebola-lab-guidelines.pdf

EVD Referral Hospitals

- Five hospitals identified in NYC area
  - Bellevue Hospital Center, North Shore LIJ Glen Cove Hospital, Mount Sinai Hospital, Montefiore Medical Center and New York Presbyterian Hospital
- Prepared or preparing to receive suspect EVD patients with concerning exposures or confirmed case

Guidance for NYC hospitals

All NYC hospitals are expected to:

- Conduct initial triage and evaluation of any suspect EVD patient who presents for care
- Identify, isolate, and stabilize patient
- Provide care for all suspect EVD patients with no known exposure

Suspect EVD reported to DOHMH

- Since July 31, 2014 DOHMH has received over 100 calls regarding suspect EVD cases
  - Many had not traveled to an Ebola-affected area or did not have symptoms to suggest Ebola
- Several "persons of interest"
  - Many with alternative diagnoses:
    - Malaria
    - Typhoid
    - Cholera

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm63e1014a3.htm?s_cid=mm63e1014a3_e

Key Messages

Key Messages - 1

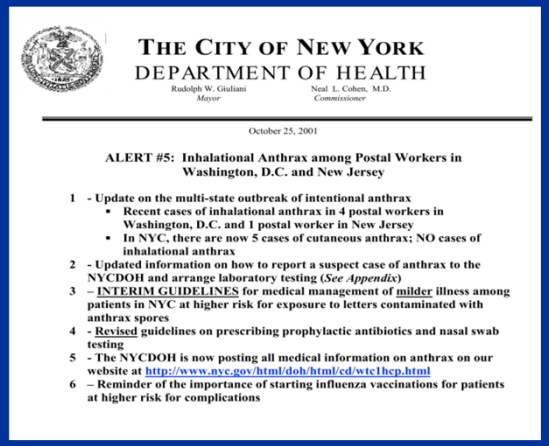
- Transmitted only by direct contact with bodily fluids
- Only countries **currently** with **widespread** outbreaks include Liberia, Sierra Leone and Guinea
- Four cases diagnosed in US, including 1 in NYC
- Providers should report patients with EVD risk, as per the algorithm, to DOHMH

Key Messages - 2

- Remain Alert for Potential Travel-Related Infections
- Obtain travel history for all patients presenting with febrile illness
  - Consider EVD in patients with febrile illness **within 21 days of travel from affected areas in West Africa**
  - Consider MERS in patients with pneumonia/ARDS within 14 days of travel from Arabian peninsula
  - Consider influenza H7N9 within 10 days of travel from mainland China

Public Health is a Partnership

- Call us for consultations
  - Provider Access Line **1-866-NYC DOH1**
  - Poison Control Center **212-POISONS**
- Register for our NYC Health Alert Network at www.nyc.gov/health/nycmed



THE CITY OF NEW YORK
DEPARTMENT OF HEALTH
Rudolph W. Giuliani, *Mayor* — Neal L. Cohen, M.D., *Commissioner*

October 25, 2001

ALERT #5: Inhalational Anthrax among Postal Workers in Washington, D.C. and New Jersey

1 - Update on the multi-state outbreak of intentional anthrax
   - Recent cases of inhalational anthrax in 4 postal workers in Washington, D.C. and 1 postal worker in New Jersey
   - In NYC, there are now 5 cases of cutaneous anthrax; NO cases of inhalational anthrax
2 - Updated information on how to report a suspect case of anthrax to the NYCDOH and arrange laboratory testing (*See Appendix*)
3 – INTERIM GUIDELINES for medical management of milder illness among patients in NYC at higher risk for exposure to letters contaminated with anthrax spores
4 - Revised guidelines on prescribing prophylactic antibiotics and nasal swab testing
5 - The NYCDOH is now posting all medical information on anthrax on our website at http://www.nyc.gov/html/doh/html/cd/wtc1hcp.html
6 – Reminder of the importance of starting influenza vaccinations for patients at higher risk for complications

Questions?