

University Hospital of Brooklyn
Biohazard Preparedness (BP) Plan

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Biohazard Preparedness (BP) Plan

PURPOSE: To enable the hospital and its staff to respond appropriately in the event that a biologic agent with the potential to cause widespread disease and panic is released into the community. The BP Plan is part of the overall UHB Disaster Plan. It is made up of three components:

- 1) Resource assessment and allocation
- 2) Education
- 3) Response

In all instances the Office of the Hospital Epidemiologist (OHE) or designee will provide input and guidance and coordinate activities with the general oversight of the Vice President for Clinical Affairs or the University, the Medical Director of the Hospital and the UHB Disaster Chairperson.

The plan recognizes that each activity will differ based upon the pathogen/agent in question and the scale of the emergency. The plan also recognizes that in the event of such an emergency overall direction of the plan may be altered at the discretion of the local authorities.

Review of the most likely pathogens/agents: (for more complete descriptions refer to www.cdc.gov)

- 1) **Anthrax-** is a non-contagious disease state caused by the gram positive bacillus *Bacillus anthracis*. It may cause either a severe inhalational disease, cutaneous disease or gastrointestinal disease. It is treatable provided antibiotics are started early after exposure or onset of disease. No special isolation precautions are necessary for patients with this disease. It is the most likely agent to be used in a bioterrorist event. Diagnostic tests include routine bacterial culture and gram stain.
- 2) **Smallpox-** is a highly contagious viral infection not seen in the United States for decades. It causes a characteristic rash and systemic symptoms. Except for individuals who recently participated in the smallpox vaccination program the entire population is considered non-immune to this agent. There is a 30%

mortality rate for naive populations. Strict airborne isolation precautions must be taken for individuals with this infection. Although in vitro studies suggest some antiviral agents may be useful for the treatment of individuals with this disease this should be considered highly experimental. There is therefore no widely available active antiviral agent for the treatment of smallpox. Smallpox vaccine is available in only very limited quantities and is controlled by the US government. Supplies are expected to increase over the next two years. In the event of a smallpox case smallpox vaccination may be reinstituted.

- 3) **Pneumonic plague-** is caused by the bacteria *Yersinia pestis*. It is most often seen as a sepsis syndrome associated with the bite of an infected flea. Plague can be aerosolized to be used as a bioweapon. In this setting it can cause a severe pneumonia and life threatening sepsis syndrome. Plague pneumonia is transmissible in droplet form. It may be treated with aminoglycosides such as streptomycin and gentamicin. Tetracycline and fluoroquinolones can be substituted.
- 4) **Botulinum toxin-**This product is one of the most powerful toxins found in nature. Its primary effect is to impair the release of acetylcholine from nerve endings. This results in a classic descending bulbar and flaccid paralysis. Toxin can be detected using a bioassay. Equine derived anti-toxin is available through the CDC.
- 5) **SARS-(Severe Acute Disease Syndrome)**
SARS is a communicable respiratory tract infection caused by a newly identified coronavirus. Infection was originally noted in Asia and spread to North America by travelers returning from Asia. Disease spread rapidly and fatally in some health care settings where proper infection control measures were not implemented. The mortality rate appears close to 10%. There is no known effective therapy or vaccine for SARS.

In general, SARS begins with a fever greater than 100.4° [$>38.0^{\circ}\text{C}$]. Other symptoms may include headache, an overall feeling of discomfort, and body aches. Some people also experience mild respiratory symptoms. The incubation period for SARS is typically 2-7 days; however, isolated reports have suggested an incubation period as long as 10 days. The illness begins generally with a prodrome of fever ($>100.4^{\circ}$ [$>38.0^{\circ}\text{C}$]). Fever often is high, sometimes is

associated with chills and rigors, and might be accompanied by other symptoms including headache, malaise, and myalgia. At the onset of illness, some persons have mild respiratory symptoms. Typically, rash and neurologic or gastrointestinal findings are absent; however, some patients have reported diarrhea during the febrile prodrome. After 2 to 7 days, SARS patients may develop a dry cough and have trouble breathing.

The primary way that SARS appears to spread is by close person-to-person contact. Most cases of SARS have involved people who cared for or lived with someone with SARS, or had direct contact with infectious material (for example, respiratory secretions) from a person who has SARS. Potential ways in which SARS can be spread include touching the skin of other people or objects that are contaminated with infectious droplets and then touching your eye(s), nose or mouth. This can happen when someone who is sick with SARS coughs or sneezes droplets onto themselves, other people, or nearby surfaces. It also is possible that SARS can be spread more broadly through the air or by other ways that are currently not known.

Because patients with developing SARS may present with either only fever or only respiratory symptoms, **infection control precautions should be instituted immediately for patients who have either fever or respiratory symptoms and have had close contact with SARS or who have a history of travel to an identified high risk area.** Concern should also be exercised in the case of otherwise healthy health care workers presenting with severe respiratory tract diseases or a cluster of severe respiratory disease in a family group. Surveillance for SARS among individuals presenting with a community acquired respiratory tract infection will depend to a large extent on the current epidemiology of the disease.

Resource Assessment and Allocation:

- 1) **Pharmaceuticals**- The Hospital Epidemiologist in conjunction with the Director of Pharmacy will be responsible for determining the adequacy of pharmaceutical supplies (i.e. medication, vaccines etc) to deal with the most likely biohazard

events. Decisions about such stocks will take into account current events and recommendations from the public health authorities. Decisions will also take into account the scale of expected biohazard events, treatment of the acutely ill from the community and the prophylaxis of hospital employees. Access to supplies from the national antibiotic stockpile and from outside vendors will be assessed. The status of the hospital stockpile will be reviewed on a yearly basis by the Director of Pharmacy in conjunction with the Bioterrorism Coordinator. A report on the hospital stockpile will be submitted yearly to the hospital Disaster Committee including an estimate of capacity for surge needs. In the event that prophylactic antibiotics must be distributed to staff such distribution will take place immediately outside the pharmacy office in the basement of UHB. Clinical supervisors will be given specially purchased 'tickets' by the pharmacy for distribution to staff in their area assuring one prescription is made available to each employee.

- 2) **Ventilators**- The Hospital Epidemiologist in conjunction with the Director of Respiratory Therapy will assess the inventory of ventilators available to the institution in order to respond and care for individuals with respiratory failure as a result of a biohazard event. The Director of Respiratory Therapy will submit a yearly report of ventilator resources to the Disaster Committee including an estimate of capacity for surge needs.
- 3) **Housekeeping and Laundry**: The handling of waste and laundry for patients with presumed or suspected agents of bioterrorism will follow guidelines as outlined by the Centers for Disease Control and Prevention (www.cdc.gov)
- 4) **Personal Protective Equipment**- In conjunction with the Director of Central Supplies the Hospital Epidemiologist will assess the adequacy of the inventory of gloves and masks appropriate to the care of varying numbers of individuals who are victims of a biohazard event. A yearly report of inventory and surge capacity to be submitted to the Disaster Committee.
- 5) **Isolation and Cohorting Facilities**- In conjunction with the Director of Nursing Services and the Chief of FM&D, the Hospital Epidemiologist will be responsible for assessing the adequacy of isolation rooms in the hospital in the event of a

need to place victims of a biohazard event in respiratory isolation. The number of working respiratory isolation rooms will meet current NYS-DOH requirements. The adequacy of negative pressure in these rooms will be maintained according to protocol set by the Department of Health. The hospital will maintain a supply of 10 portable HEPA filters which can be used if the number of isolation rooms is not adequate. These portable HEPA filters will be stored, maintained and supplied by Central Supply. The Director of Central Supply or designate will be responsible for tracking these units. They will submit a report on portable HEPA filter inventory on a yearly basis to the Disaster Committee and the capacity to expand for surge. If isolation facilities plus portable HEPA filters are not adequate to the scale of the number of patients requiring care, then efforts will be made to cohort patients requiring respiratory isolation on Nursing Station 62. This decision will be made by the Medical Director in conjunction with the Hospital Epidemiologist (or designate). In such an event patients in this area will be moved or discharged. Protocol for the rapid discharge of stable patients as well as the transfer of patients who need ongoing clinical care but do not necessitate respiratory isolation is outlined in the Disaster Plan. When Nursing Station 62 is used for this purpose all patient doors will be kept closed at all times except when staff enter or leave the room. Corridor fire doors leading off the unit will also be closed. Once designated, movement by staff onto this unit will be restricted by State Police at the direction of the Incident Command Center. Provision of negative air flow in the unit will be assessed by FM & D at the request of the Medical Director and Hospital Epidemiologist.

In the event of a community wide medical emergency that overwhelms routine bed allocation, respiratory isolation will not be possible. As necessary to meet these needs all out-patient suites will be utilized for clinical care. Cots, stretchers and available bedding will be provided by hospital administration. Staffing and the provision of other supplies for patient care will be supplied by Nursing according to departmental protocol.

Patients placed in isolation due to known or presumed exposure to agents of bioterrorism will be allowed visitors only at the discretion of the Incident Command Center in conjunction with the Hospital Epidemiologist (or designate).

In-hospital transportation of patients placed in isolation due to known or presumed exposure to agents of bioterrorism will not routinely be allowed except at the discretion of the Incident Command Center (which will be opened in the event of bioterrorism events).

- 6) **Diagnosis**- Diagnostic tests for pathogens related to bioterrorism will be conducted in accordance with NYC-DOH guidelines.
- 7) **Exposure Reporting**- The recording of potential in-hospital exposure of patients, staff and visitors to individuals with known or presumed agents of bioterrorism will be conducted by staff from the Department of Epidemiology in conjunction with Public Safety personnel. This information will be shared with representatives of the NYC- Department of Health and Mental Hygiene.

Education

The OHE will be responsible, with the support of Hospital Administration and the Disaster Committee, to coordinate education activities in the institution as they relate to a biohazard event. The OHE will maintain close contact with public health authorities and will provide information to all sectors of the hospital community on an ongoing basis regarding the latest information on expected or actual biohazard events. This will be done through a variety of means including letters, web publications, lectures, videos etc. The OHE will work in conjunction with the Department of Emergency Medicine to make certain that there is maintained a high level of awareness among staff regarding the potential need to isolate patients with fever and a rash or fever and a cough. Patients will be encouraged to report such symptoms immediately to clinical staff.

Response:

- 1) In the setting of a BH event the Hospital Epidemiologist will be the designated Medical Control Officer for UHB. In his or her absence the MCO will be the Infection Control Director, the Chief of Infectious Diseases, or the Infectious Diseases Attending on service as determined by availability. At all times during a disaster the MCO will confer with Medical Director of the Hospital.
- 2) The response to any biohazard event will be determined by the scale of the event and the pathogen involved.

- 3) An **internal biohazard event** (i.e. a single or limited number of cases identified after hospitalization) will be managed as would any infectious etiology requiring disease or condition specific isolation precautions. An internal BH event might involve any of the agents listed above but could include other agents as well. In such an event the UHB Infection Control Office is alerted by either clinical or administrative staff. It will be the responsibility of the MCO (OHE), in consultation with Hospital Administration, to see that the NYC-DOH is notified regarding any suspicious or verified BH event and that the Incident Command Center is opened to plan for possible longitudinal disaster.
- 4) In the event of an **external BH event** the OHE (MCO for BH) will be notified. The need for implementation of the Hospital Disaster Plan will be determined by the Medical Director in consultation with the Hospital Epidemiologist or designate. Consultation with Hospital Administration and with representatives of the New York City Department of Health and Mental Hygiene will be sought. The need to activate the Hospital Disaster Plan will be determined by the scale of the event and the assessment of surge needs and planning. If a BH event results in implementation of the Hospital Disaster Plan the following steps may be taken:
 - a) Hospital lock down will occur (see Appendix A)
 - b) Access will only be provided through the ED and Clarkson Avenue Ambulatory entrance where preliminary screening as to the need to report to the Emergency Department will be the responsibility of the Emergency Department.
 - c) Notification and Communication of a Disaster to hospital staff will take place as per protocol outlined in the hospital disaster plan (see Appendix B)
 - c) The MCO will confer with the ED Director regarding the screening and triaging of incoming patients
 - d) The MCO will confer with Hospital Administration, Director of Nursing Services and FM&D regarding the allocation of hospital beds and the need to cohort patients based on their presumptive diagnosis.
 - e) The MCO, Director of Pharmacy and the Director of Employee Health Services will confer regarding the provision of prophylactic antibiotics to hospital staff.

- f) Universal standard precautions will at a minimum be observed.
- g) Screening and subsequent triage of patients will take be conducted as per the UHB Disaster Plan pre-triage screening protocol for biologic events (Appendix C-Section: ' Pre-triage Screening Policy: Highly Contagious/Highly Dangerous Infectious Diseases')
- h) Clinical Microbiology Laboratory Director will be notified. The laboratory SOP for the handling of potential agents of bioterrorism will be consulted (Appendix D)

Anthrax- not contagious therefore no special measures for isolation or cohorting will be necessary except as it relates to the ease of management. Universal standard precaution will be followed. Decontamination will not ordinarily be necessary since patients who are ill with anthrax will likely have been exposed many days before presentation. The clinical microbiology laboratories should be notified at the first indication of anthrax so that safe specimen processing under biosafety level 2 conditions can be undertaken. A number of disinfectants used for standard hospital infection control, such as hypochlorite, are effective in cleaning environmental surfaces contaminated with infected bodily fluids. Laundry should be bagged as biohazard material and laundered in soap and water.

Smallpox- Patients presenting to the ER or admitted to the floor with fever and a rash will be assessed for possible smallpox by staff. Assessment will take into account presenting symptoms, i.e. morphology of the rash, their time course and accompanying features as well as the up-to-date epidemiologic factors consistent with smallpox exposure. On the basis of these considerations patients considered to have likely or possible smallpox will be isolated rapidly in the most immediately accessible negative pressure, airborne pathogen isolation facility. Patients being transferred will be required to wear an N95 respirator and will be covered as completely as possible with regular hospital sheets. Staff transporting or handling such patients in any way must themselves use an N95 respirator and latex gloves.

The Infection Control Office will be immediately notified about such patients and will confer with the AOD. Consultation will be sought with the NYC DOHMH. Based on preliminary assessment the Infection Control Officer and the AOD will decide whether the Incident Command Center is to be activated.

The AOD in conjunction with the Infection Control Staff and the public safety office will begin an inventory of all staff members potentially exposed to the presumed index case. Reference will be made to Infection Control records regarding previous vaccination history of staff. Those most recently vaccinated against smallpox through NYC-DOHMH initiatives will be notified and asked to provide immediate care for the patient. Prophylactic smallpox vaccination of staff and/or the community will be at the discretion of the NYC-DOHMH. The Infection Control Office in conjunction with hospital administration will provide guidance for hospital staff including those exposed and those not presumptively exposed about where to go to obtain vaccination. In addition staff inadvertently exposed during the initial evaluation of the index patient will be required clearance by EHS on a daily basis for 3 weeks after exposure before returning to work.

In the event that the case of presumed smallpox has been verified or at least is very likely the hospital (i.e. the Director of Admissions and the Medical Charge Officer) will conduct an immediate assessment of the availability of all negative pressure respiratory isolation rooms. Patients already occupying these spaces who do not require continued isolation will be moved out of those spaces to either less acute beds or they will be discharged based on the protocol established in the 'Surge Capacity' section of the disaster plan. The MCO, Director of Infection Control, and the Hospital CEO or designate will determine the advisability of hospital 'lockdown' (see Disaster Plan). Such a procedure would be implemented in order to avoid other potentially infected individuals from entering the facility and avoiding proper infection control protocols. In this circumstance entry would only be through the ED where rapid triage of potentially infectious cases would take place. Triage staff would be required to use N95 masks and gloves for all contact. In the event that not enough negative pressure airborne isolation rooms are available, cohorting may be done (i.e. 2 patients per room). In the event that this is not enough, Nursing Station 62 will be converted to a respiratory isolation ward. Patients will be moved from here to other available beds in the hospital. Discharges that can be made will be rapidly implemented. Swing space in the OPD area as identified in the Surge Capacity section of the Disaster Plan will be made available for NS 62 patients. Dedicated staff will be committed to these areas by Nursing and the other Clinical Departments at the request of the Medical Director. All doors on patient rooms will be closed as will the doorways leading out to the main corridor leading to the

elevator vestibule. Plastic barrier sheeting will be placed in front of the doors leading to the nursing ward. A public safety officer will be stationed outside the nursing station. Only authorized personnel as designated by the Senior hospital administrator in conjunction with the Infection Control Office will be permitted access to the ward. All laundry and waste should be placed in biohazard bags and autoclaved before being laundered or incinerated. Laboratory examination requires high containment BL-4 facilities and should not be undertaken at UHB. All bedding and clothing of smallpox patients should be bagged in biohazard containers, autoclaved and laundered in hot water with bleach. Standard hospital disinfectants are effective for cleaning contaminated surfaces.

Plague- Pneumonic plague may be spread through respiratory droplets. Patients with known or suspected plague should be triaged from the emergency area with a disposable surgical or other face mask to the hospital ward promptly. There they should be placed on droplet precautions (respiratory isolation). Prophylaxis should be considered for all close contacts. Those refusing prophylaxis should be monitored for the development of fever or other signs of infection. Patients should remain in isolation for 48 hours after the initiation of treatment and until clinical improvement is noted. Patients requiring transport should wear surgical face masks. Standard procedures for cleaning of bedding and environmental surfaces should be followed. The clinical microbiology laboratory should be alerted when specimens are sent with presumed *Yersinia pestis*. Specimens should be processed in a BL-2 facility.

Botulinum toxin- Since exposure might result in illness within hours, it is necessary that patients presenting as victims of an intentional release of botulinum toxin have their clothes removed and washed and their skin washed with soap and water. Contaminated surfaces may be cleaned with 0.1% hypochlorite bleach solution. Medical personnel caring for patients with suspected botulism should use standard universal precautions. Isolation is not necessary.

SARS- If SARS is suspected by clinical staff the Infection Control Office or designate should be contacted immediately. They will be responsible for contacting the NYC-DOH.

A surgical mask should be placed on such patients early during the triage process until other recommended infection control precautions can be instituted including:

Universal/Standard precautions (e.g., hand hygiene); in addition to routine standard precautions, health-care personnel should wear eye protection for all patient contact. Contact precautions (e.g., use of gown and gloves for contact with the patient or their environment).

Respiratory precautions (e.g., an isolation room with negative pressure relative to the surrounding area and use of an N-95 disposable respirator and goggles for persons entering the room) should be employed. Routine laboratory tests (i.e. CBC, Chem panel, CXR, LDH) including specific tests for common respiratory pathogens including influenza A and B (in flu season) should be performed.

If subsequent testing done at the instruction of NYC-DOH confirms a diagnosis of SARS health care workers inadvertently exposed to the index patient should be screened through the Student Employee Health Services/ED for the onset of fever or respiratory tract symptoms prior to coming to work. Those reporting symptoms should receive further medical evaluation and be reported to the NYCDOH.

The need for ongoing isolation of patients will be assessed by the Infection Control Office in conjunction with the NYC-DOH and the physician of record.

Appendix A: UNIVERSITY POLICE/PUBLIC SAFETY EMERGENCY PREPAREDNESS MANAGEMENT PLAN

Introduction

This procedure provides a brief overview of the types of disasters posing a potential threat to Downstate Medical Center. These can include: Fire, Severe Storms, Hurricanes, Winter Storms, Utility Failures, Hazardous Material Accidents, Civil Disorders, Terrorism, Bomb Threats, Explosion, Major Transportation accidents etc. Depending on the nature of the incident and its location, various sections of the plan will be implemented and acted upon.

As with any major or unusual event, supervisors should ensure that the appropriate notifications are made to University Police senior management and that there are sufficient personnel on duty to handle the incident. Supervisors are authorized to call in additional resources as necessary. Depending on the nature of the incident, special attention is to be given to the building entrances/exits, to control of the main bank and L&D area elevators in the hospital, and to the control of pedestrian and vehicular traffic in the area of the entrance to the Emergency Services area(s).

In all cases affecting University Hospital, the ranking University Police supervisor will confer with the Senior Administrator on Duty and the Chief Operating Officer/Senior

Vice President for Administration and the Office for Institutional Advancement as appropriate. For other Downstate locations, the Chief Operating Officer/Senior Vice President for Administration, the Dean(s), the Office for Institutional Advancement, and other management personnel as appropriate will be conferred with.

- In the event a disaster involves University Hospital, the Senior Administrator on Duty (AOD), the Disaster Medical Director (DMD), the Emergency Department Attending, the Chief Executive Officer (CEO) or the Chief Operating Officer (COO) or their designees may authorize the implementation of the hospital's disaster plan and they will activate the Hospital Command Center in room A1-359 (Hospital Administration Offices). The Command Center phone number will be x2401, 2402, 2403, 2404 & 1515. A University Police officer will be assigned to this location as liaison officer. If the hospital is not involved, the University Police Office will function as the Command Center.
- There are two distinct phases to the Emergency Preparedness Management Plan, beginning with an alert of a possible disaster, with limited notifications, and the actual disaster when all portions of the plan are put into effect. When notified of a disaster alert, University Police supervisor(s) shall make the necessary chain of command notifications and prepare to activate our disaster plan.
- If necessary, and upon direction from the University Hospital Senior Administrator on duty, and the University Chief Operating Officer, the University Police dispatcher will ring the disaster bell (4-4-4).
- In the event of a fire, the Desk Officer will activate the fire alarm system to the Fire Department and will also call 911. (See Fire Plan and Evacuation procedures).
- Should an emergency occur, evacuation of the facility may be necessary. Upon direction from the University Hospital Senior Administrator on Duty, the evacuation bell (3-3-3-3) will be activated. Evacuation routes for facilities are displayed throughout staff work areas. University Police staff will assist in the evacuation process.
- During the activation of the Emergency Preparedness Management Plan, all entrances to the facilities will be secured and only those authorized will be permitted into the buildings. Hospital visiting hours will be suspended, and outpatient clinics will normally be closed.
- The University Police Department is a crucial component in maintaining the operation of the hospital's Emergency Department during a disaster response. Our function is to clear the waiting areas, limit access to the Emergency Department, to maintain communications via portable radio in the event of a communications failure, and to cordon off any decontamination area in the event of a Hazardous Materials incident.
- In the event the hospital will be accepting emergency patients, the main triage site will be located in the vestibule and corridor adjacent to the Emergency Department. Ambulances and emergency vehicles will enter through the E. 37

St. Ambulance entrance. University Police personnel will monitor these areas to ensure appropriate traffic flow. Appropriate identification vests will be worn by the Disaster Control Officer and Triage personnel. Only those personnel authorized by the Disaster Control Officer are to be permitted in the triage area(s).

- A Family Reception area will be established in the hospital cafeteria. All family arriving at the hospital will be directed to the 445 Lenox Rd. entrance and then University Police personnel will escort them to the reception area.
- Patient escort and mail-room personnel will be assigned to the University Police office and utilized for messenger duties in the event telephone service is not operational. In addition, Hospital Administration also has a supply of portable radios which will be distributed to key units on various floors to serve as a communications link.
- After primary assignments are staffed as noted above, extra personnel are to be assigned to each floor of the hospital. Priority is given to the most sensitive areas (ie. CCU, ED, CTICU, OR, L&D, MICU, PICU etc.). Our function is to maintain order and to provide assistance and communication capability as required.
- At no time will media personnel be permitted to be unescorted in any of the Downstate Medical Center facilities. The Office of Institutional Advancement will be responsible for the coordination of all media activity. When authorized by the Office of Institutional Advancement, the media will utilize the President's Board Room or the Special Functions Room of the HSEB for press conferences etc.
- Depending on the nature of the incident, we may be called upon to provide transportation services either to pickup personnel and or equipment. Supervisors will ensure that all Transportation vehicles are fueled and ready to respond.
- A Command Log will be utilized for any of these incidents. Thorough entries will be made to account for all personnel and incidents.
- At the conclusion of the incident, the All Clear signal (1-1-1-1) will be activated by the Telecommunications Unit.

Attached to this procedure is a listing of specialized equipment on hand at University Police facilities. There is also a checklist for supervisors that should be followed in emergency situations.

Emergency Telephone Numbers

The University Police Desk has a listing of emergency contact numbers for Downstate Medical Center (SOP IV-H). In addition, contact numbers are available for all members of the University Police/Public Safety Department. In the event of an emergency, efforts will be made to notify the appropriate individuals and documentation for same will be maintained.

Staff Evacuation Procedures

When evacuation alarm sounds (Alarm Bells 3-3-3-3) or you are directed to evacuate the facility, all occupants, with the exception of University Police personnel, and Nursing and Medical staff will immediately leave the building. University Police personnel will:

1. Remain calm.
2. Shut down all hazardous operations.
3. Assist disabled persons. Patients in immediate danger shall be moved first. Next, move ambulatory patients towards a safe area or fire exit on the same floor. Wheelchair cases shall be pushed to a safe area on the same floor. Mobility impaired patients can be carried on litters, blankets, or dragged along the floor on blankets.
4. Have personnel leave the area in an orderly fashion. Close doors, but do not lock.
5. Follow established evacuation routes. Use stairways or proceed into the Basic Science Building, NEVER use elevators.
6. Move away from the structure. Go directly to the assembly area. Report to the Evacuation Coordinator for a "head count".
7. Do not block the street or driveway.
8. Direct personnel to stay at the assembly area until instructed otherwise.
9. Do not allow anyone back into the building until the "ALL CLEAR" SIGNAL (1-1-1-1) is sounded.

Fire

See Fire Response Plans (SOP IV - E-1)

1. The officer receiving a report of a fire is to gather data from the caller - the location of the fire (building, floor, room etc.), the caller's name and extension.
2. Advise the caller to activate the fire alarm, if it hasn't been done yet.
3. Activate the NYC fire alarm box in the University Police office. Also call 911.
4. Request the phone operator to announce "CODE RED" with the location on the overhead page system.
5. An officer is assigned to direct the Fire Department to the appropriate location upon arrival. He/she also assists with traffic and crowd control.
6. Other officers are dispatched to assist with control of elevators, and to assist with implementation of the fire plan and evacuation of patients as required.

In a fire situation, personnel should be directed to the nearest safe stairway and they should go down at least two floors below the fire. At that point they should go to the nearest safe area and await further instructions. Patients and personnel can be transferred to adjoining buildings if horizontal evacuation through the Basic Science Building can be effected in place of using stairways.

Extremes of Weather

In the event of a severe storm watch within the surrounding area:

1. Listen to the local radio/TV or NOAA Weather Radio for instructions.
2. Plan ahead before the storm arrives.
3. Tie down loose items located outside or move them indoors.
4. Open windows slightly, time permitting, on the side away from the direction of the storm's approach.
5. Check battery-powered equipment such as portable radios and lights. Also ensure back-up power sources (generators) are in operating condition.
6. Fill vehicles with gas.
7. Have emergency "winter storm supplies" in the vehicle (e.g., sand, shovel, windshield scraper, tow chain or rope, flashlight, flares. It's also good to have a blanket, heavy gloves, overshoes, extra woolen socks, and winter headgear).

Power Outage

In the event of a power outage:

1. In the event of a brownout or blackout, the senior hospital administrator will activate the Command Center.
2. University Police personnel will be assigned to the Command Center to assist with communications.
3. All requests for information and communications relative to a power failure emergency shall be directed to the Command Center.
4. University Police personnel will be assigned to various floors to assist with and/or augment communications with the various departments in the hospital.
5. All building entrances/exits will be secured, and only those persons who are authorized will be permitted access. All visitors will be requested to leave the hospital.
6. Supervisor(s) will patrol all buildings to ensure that all special procedures are followed and that there are no breaches of security.
7. If a blackout occurs, the emergency generators will automatically activate, supplying power to critical services and areas such as all critical care units, fire alarms, switchboard and paging system etc. Corridors, stairwells and exit lights will also be operational. Note that only elevators #8 and 9 will have power.
8. If directed to evacuate, assist disabled persons and follow directions given by the patrol supervisor.

Hazardous Material Accident

(See SOP VI - E)

Civil Disorder and Demonstrations

(See SOP IV - B11)

Terrorism

An act of terrorism is similar to other man-made disasters in that the main characteristic is sudden onset and the resultant effect is significant human injury and/or death.

Because of the nature of the incident, in many cases the opportunity for crisis management or intervention is not possible. Because terrorism is a deliberate act, these incidents may present unique hazards to response personnel. For example, it would not be unusual for terrorists to plan secondary events that target emergency responders. Although the results of a terrorist attack may not be different from conventional incidents, the approach to them must be. Aggressive response to these incidents must be curtailed. It must be moderated with careful consideration for any potential secondary threats to responders.

Should an act of terrorism occur within the surrounding area:

1. Follow the instruction of the Supervisor/Desk Officer and emergency preparedness personnel.
2. If an explosion occurs, take cover immediately and anticipate there may be other explosions.
3. Notify Desk Officer of any known hazards (e.g., fire, bomb threat).
4. Stay indoors and away from windows unless directed to evacuate.
5. Evacuate when directed and follow procedures included at the beginning of this procedure and any instructions of the Evacuation Coordinators.
6. If incident is a nuclear, biological or chemical incident, ensure that appropriate personal protective equipment is utilized.

See University Hospital Emergency Preparedness Management Plan for specific information on these types of incidents.

Bomb Threat

(See SOP IV - B2)

Explosion

In case of an explosion in your area:

1. Remain calm.
2. Take cover under a table or desk.
3. Be prepared for possible further explosions.
4. Stay away from windows, mirrors, overhead fixtures, filing cabinets, bookcases, etc.
5. Evacuate calmly, when directed, to the Assembly Area. Provide assistance to persons attempting to evacuate.

6. Do not move seriously injured persons, unless they are in immediate danger (fire, building collapse, etc.)
7. Open doors carefully. Watch for falling objects.
8. Do not use elevators.
9. Avoid using the telephone, except in a life threatening situation.
10. Do not use matches or lighters.
11. Do not re-enter the affected area until directed by emergency preparedness personnel.

Major Transportation Accident

Major transportation accidents are those involving any of the various modes of transportation (e.g., highways, waterways, railways, and airways). Such accidents could occur at any time and any place, and often involve multiple injuries and/or deaths.

Many facilities are not prepared (and are not expected to be prepared) to cope with the type of problems created by a major transportation accident. Should such a disaster occur, personnel should initiate life-saving and property protection actions until assistance can be provided from other authorities. For example, University Police personnel are trained to extinguish small fires and to ensure the safe evacuation of the public. The medical staff and/or persons trained in first aid can attend injured persons. Also, during regular work hours, all staff can implement appropriate measures to protect the collections and other physical assets.

Should a major transportation accident occur, many decisions regarding the appropriate emergency actions to take will have to be made "on-the-spot" based on the situation. For instance, are hazardous materials involved and/or are there casualties? Is there a need to evacuate? Is there damage to the facility itself and/or are the utilities functioning? For the appropriate protective actions to take for a specific hazard (i.e., fire, hazardous materials, explosions, utility failure, etc.) refer to the respective section in our SOP Manual.

SPECIALIZED EQUIPMENT ON HAND FOR UNIVERSITY POLICE/PUBLIC SAFETY

ITEM	AMOUNT	REMARKS
Portable diesel generator	1	At Transportation
Portable 12v lights/chargers	19	UPO/Garage
Radio Base Stations	2	UPO Transportation
Portable UHF radios	40	UPO

Portable radio batteries	68	UPO
Portable radio charging units	44	UPO
Hand held flashlights	92	Transportation
Flashlight batteries	2 doz. Spares	Transportation
Respirators/ P-100 filters	35	UPO
Disposable Tyvek Clothing	Case	UPO
Portable Cell Phones	5	Chiefs/Quartermaster.

NOTE: There are two (2) 800 MHz Emergency systems (radios) and two (2) satellite phones for use in the Command Centers. In addition, FM&D has additional lights and other specialized equipment.

SUPERVISOR'S CHECK LIST		
1. RESPONSIBILITIES	DONE	TIME
Consult with the ED Attending Physician and the AOD as to the magnitude of the disaster and what plan to implement.		
Assign a University Police Officer to the Command Center.		
Notify Chief, Assistant/Deputy Chiefs.		
Secure all hospital/other building entrances/exits.		

Recall personnel as needed.		
Assign personnel to critical care units as necessary.		
Survey equipment available: radios/lights/portable generator etc.		
2. COMMUNICATIONS SYSTEMS:	Operating	
	YES	NO
Telephones	G	G
Portable Radios	G	G
Battery Charging Capability	G	G
Backup - Main portable radio system at the University Police Office in U.H. is connected to the hospital's emergency generator. An additional backup dispatching unit is set up in Transportation with its own portable diesel generator		
3. STAFFING LEVELS:	Those Scheduled Appear	
	YES	NO
Normally Scheduled Staff	G	G
Overtime Scheduled Staff	G	G
Backup - Hold over staff already on duty from previous tour until sufficient numbers of personnel arrive and make reliefs. Call in additional staff if necessary.		
4. POWER FAILURE	Operating	
	YES	NO
Sufficient 12 v. portable lights	G	G
Portable battery charging systems working	G	G
Fire Alarm Systems:	G	G
University Hospital	G	G
Basic Science Center	G	G

Health Science Education Bldg.	G	G
811 New York Ave. Dorm	G	G
825 New York Ave. Dorm	G	G
Student Activities Building	G	G
State Garage E. 34 St.	G	G
151 E. 34 St. Admin. Bldg.	G	G
440 Lenox Rd.	G	G
736 Parkside Ave. Warehouse	G	G
711 Parkside Ave. Bus. Office	G	G
710 Parkside Ave. Dialysis Unit	G	G
840 Lefferts Ave. Satellite Clinic	G	G
Junction Satellite Clinic	G	G
Throop Satellite Clinic	G	G
Backup - Establish fire watch in affected areas.		
5. SECURITY ALARMS	Operational	
	YES	NO
Intrusion Alarms:		
151 E. 34 St. Admin. Bldg.	G	G
736 Parkside Ave. Warehouse	G	G
711 Parkside Ave. Bus. Offices	G	G
710 Parkside Ave. Dialysis Unit	G	G
840 Lefferts Ave. Satellite Clinic	G	G
Junction Satellite Clinic	G	G
Throop Satellite Clinic	G	G
Panic Alarms	G	G
Backup - Establish Directed Patrols of affected area(s).		

6. PARKING SPACE (34 St. Garage operational 7 days/ 24hours)	Operating	
	YES	NO
Essential Lighting	G	G
Fire Alarm System	G	G
Emergency Generator	G	G
Backup - If additional space needed or above systems not operational, open off-site outdoor parking areas.		
7. TRANSPORTATION SERVICE	Arrive As Scheduled	
	YES	NO
If Transportation Unit personnel not scheduled, Uniformed University Police/Public Safety personnel to be assigned task.	G	G
8. CCTV SYSTEMS	Operational	
	YES	NO
University Hospital	G	G
Basic Science Building	G	G
Health Science Education Building	G	G
Dorms	G	G
440 Lenox Road	G	G
Backup – Assign Directed Patrols if necessary.		

Appendix B:

Identification and Communication of a Potential Disaster

A. What to do if you learn of a potential Disaster

Any employee who learns of an occurrence that might constitute a disaster should attempt to obtain the following information:

- The nature of the occurrence
- Estimated number of casualties
- Type of injuries
- Expected number and estimated time of arrival of victims

B. Who to notify of a potential Disaster

- The same action shall be taken for all potential Disasters
- The employee who learns of the occurrence must notify the Administrator on Duty (AOD) at 2401, 1515, or (917) 218-4439 and Hospital Police
- The AOD must then notify the senior administrator on site.
- The AOD and Senior Administrator will decide if the occurrence requires activation of the hospital's Emergency Management Plan. On off hours the AOD will confer with Senior Administrator on Call and the Senior ED Physician on site before activation of the plan.
- Only CEO, COO, CMO, Senior Administrator On Site (AOD) and the Senior ED Physician have the authority to initiate the Emergency Management Plan for Disasters.

Initiation of the Emergency Management Plan:

The Emergency Management Plan may be initiated in two distinct phases, **Alert** and **Activation**.

Alert:

The Alert Phase of the EMP is when a potential disaster situation exists that could effect the medical center but does not warrant full activation of the plan (distant severe weather, terrorist threat, major event in the city).

The Alert Phase is also for situations where there is an emergency situation at the medical center that partially compromises our ability to fulfill the hospital's mission (partial utility failure, ED crowding, VIP patient, planned utility shutdown, equipment failures, etc)

The Alert Phase is to be utilized as a time for senior administration to evaluate the potential needs of the facility and make contingency plans for the specific event. This will include, but not be limited to:

- Opening the command center
- Appointment of the Incident Commander

- Appointment of one Command Center Recorder
- Key personnel list (see below) paged by operator to command center
- Appointment of the top of the HEICS TO (Top 8 positions)
- Review of the Job Action Sheets for appointed positions
- Operations Chief conducts review of staffing and bed count

Page operator to page

KEY Personnel List	NAME
Chief Medical Officer	Robert Jacobs, M.D.
Senior Administrators:	
&Interim Director of Nursing & CNO	Margaret Jackson
&AVP Perioperative Services	Anny Yeung
&SA for Medical Management	Jaqueline Herron
&SA for OPD	Jocelyn Alleyne
&SA Environmental Svcs./Const. Capital Mgmt.	Robert Richards
&SA Ancillary Services	Maria Mendez
&SA Materials Management	William Gerdes
Interim Director of Nursing for ED	Judy Drummer
Medical Director of ED	Roger Holt, MD
Emergency Medicine Disaster Coordinator	Bonnie Arquilla, DO
AVP for Physical Facilities	Reggie Powell
Chief of University Police	Tom Dugan
Telecommunication Administrator	Melanie Scott

Activation:

Activation of Emergency Management Plan

The Activation Phase of the EMP is to be utilized when a disaster has occurred at the medical center or outside the facility and it is expected to compromise or impact the operations of the hospital.

The Administrator on Duty (AOD) or the Senior Administrator is responsible for the following actions to initiate the full EMP:

- Appoint the Incident Commander
- Open the Command Center and initiate HEICS
- Appoint two Command Center Recorders
- Incident commander notifies Hospital Police to activate the disaster bells (**call 2626**)
- Notify the operator to page Key Personnel to the command center
- Notify the page operator to sound CODE D and instruct personnel to follow their departmental plans via the overhead page
- Appointment of the top of the HEICS TO (Top 8 positions)
- Review of the Job Action Sheets for appointed positions
- Operations Chief conducts review of staffing and bed count
- Ensure each department will activate their disaster plan under the administrative control of the Incident Commander

Hospital Police:

Shall ring the disaster bells once notified by the Incident Commander that the Activation Phase of the EMP has been initiated (4-4-4-4)

The hospital police shall have a representative in the command center who is to be appointed as the Safety and Security Officer. They should verbally confirm with the Incident commander that the bells were activated

Hospital Police will follow their internal SOPs related to disasters (refer to Public Safety SOPs#)

Page Operator:

Page operator will notify the executive suite or AOD of any disaster situations (2401, or page 917) 218-4439) and Hospital Police

Page operator shall page the "Key Personnel" List at the instruction of the command center

The page operator will also notify hospital police of any "disaster" situation called into the operators.

Summary of Phases of EMP Initiation:

Phase	Notification	Staff	Clinical Space
Alert	Limited notification to key personnel	Not called, no change of activity or function	Prepared to expand
Activation	Key personnel and all staff via bells and overhead page	Notified and departmental plans activated	Expand as required

Alert Check List

This sheet is to be completed by the Senior Administrator who is opening the Command Center

ACTIONS TO BE COMPLETED IF FIRST 5 MINUTES OF DECLARING DISASTER	YES
Open Command Center	
Appoint Incident Commander	
Appoint Command Center Recorder	
Key Personnel paged by operator to Command Center (See Page 2)	
Time Key Personnel returns calls is recorded (Page 2)	
Top of HEICS TO appointed (Top 8 Positions)	
Job Action Sheets reviewed for appointed positions	
Operations Chief conducts review of staffing and bed count	

SERVICES	AVAILABLE BEDS	IS STAFFING ADEQUATE Yes/No
----------	----------------	--------------------------------

Medical/Surgical		
➤ NS 61		
➤ NS 62		
➤ NS 71		
➤ NS 73		
➤ NS 81		
➤ NS 82		
ICU		
➤ NS 24		
➤ NS 26		
➤ NS 33		
➤ NS 43		
➤ NS 83		
Pediatrics		
➤ NS 41		
➤ NS 42		
OB/GYN		
➤ NS 31		
➤ NS 32		
# of admitted patients in ED		

Page Operator to Page

The page operator will page the following personnel. Please record time calls are returned to the Command Center

KEY PERSONNEL	NAME	PAGER #S	TIME CALL RETURNED
Chief Medical Officer	Robert Jacobs, M.D.	917) 760-1429	
Senior Administrators:			
Interim Director of Nursing & CNO	Margaret Jackson	917) 218-6499	
AVP Perioperative Services	Anny Yeung	917) 760-0735	
SA for Medical Management	Jaqueline Herron	917) 760-0033	
SA Environmental Svcs/Const. Capital Mgmt.	Robert Richards	917) 760-0007	
SA Ancillary Services	Maria Mendez	917) 760-0790	
SA Materials Management	William Gerdes	917) 760-0000	
Interim Director of Nursing for ED	Judy Drummer	917) 760-0216	
Medical Director of ED	G. Richard Bruno, MD	917) 761-1017	
Emergency Medicine Disaster Coordinator	Bonnie Arquilla, MD	917) 760-1454	

AVP for Physical Facilities	Reggie Powell	917) 948-2566	
Chief of University Police	Tom Dugan	917) 762-9857	
Telecommunication Administrator	Melanie Scott	917) 760-0798	

Appendix C:

UHB Triage Plan

A. Pre-Hospital and ED

Traffic Pattern and Set Up

Traffic flow routes predetermined with NYPD for mass transit, ambulances, employees, and press will be set up. In coordination/cooperation with New York Police Department (NYPD) and hospital police from both institutions (KCH and UHB) the main street between the facilities (Clarkson ave) will be shut down to traffic immediately. Police will begin towing/flat bedding any vehicles on the street between the two hospitals within the hour. Lanes for ambulance triage will be set up with wooden barricades. Traffic will be diverted to streets south of the hospital as per NYPD. City Bus routes will likewise be diverted around the Hospitals to Linden blvd. The street immediately north (Winthrop) will be closed except for arrival of supplies, equipment, employee parking, and the dialysis access. This traffic flow will allow ambulance and patient flow to be directed toward the centralized triage station, while diverting press and the convergence phenomenon to the periphery and around the hospitals, away from the emergency entrances. Waterproof signs to identify key areas kept by UHB hospital police will be posted designating the triage areas, etc. Ambulatory patients will be directed into a central ambulatory triage. In the event of chemical or other toxic exposure this will help ensure safety of hospital personnel and avoid contamination of the treating facility plant. Location of central/ambulatory triage is in front of the D building of KCHC, under the

canopy if inclement weather. Here in this central location patients are equidistant from the entrances of UHB and KCH, and can be sent to either as designated.

Joint Triage

The staff and facilities of SUNY University Hospital of Brooklyn (UHB), Kings County Hospital (KCH), Kingsbrook Jewish (KBJ), and Kingsborough Psychiatric Hospital (KP) will be integrated with consideration of patient services available, resulting in better patient flow and distribution. Duplication of services will be minimized in order to maximize resources. No need for prehospital personnel to make designation decisions because unique/individual resources of each of the institutions are familiar to the triage staff, therefore patients can be brought to one centralized triage area.

After receiving notification, the Command centers will activate joint ambulance triage, and a single ambulatory triage station will be set up between KCHC and UHB. The first arriving casualties will be directed out toward the site where the exterior triage will be established, so as to not contaminate the facilities. All exposed and potentially exposed individuals should receive an initial brief triage, performed by medical personnel in PPE, before decontamination. Decontamination must be performed on all victims and responders before they cross into noncontaminated areas. (See Hazmat Protocols)

KCHC will provide three nurses and one attending for ambulatory triage. UHB will provide two attendings, two nurses and a technician with monitors for blood pressure, pulse oximetry, and temperature, a polaroid camera, charts, and ID badges. Gloves, masks and protective equipment necessary are supplied in case a chemical, biological, radioactive, or unknown agent is involved in the disaster. Because this triage station is outdoors, accumulation and ventilation of contaminants is not a great concern.

A single ambulance triage will also be set up between the two institutions for quick review in each ambulance by the triage physician, who will designate which hospital to deposit the patient and in what order. The ambulance triage physician will have a recorder to keep track of the number of patients sent to each facility.

Triage is a dynamic process therefore, all available wheelchairs and stretchers with transporters are set aside at the ambulatory site for upgrades of previously stable patients, or if an occasional “immediate” is brought by civilian means, to be transported.

Centrally (strategically) placed observers are used to watch ambulatory patients from one spot to another, not escorts, which are, too labor intensive. Clear lanes of traffic are (cordoned off) set up connecting the key areas for this purpose. Ambulatory patients presenting by taxi, walk in etc. will be funneled to ambulatory triage by NYPD, city and state hospital police and signage. The front lobby of D building can serve as holding areas for triage in inclement weather at the direction of the command center, given no Hazmat hazard. Triage personnel are identified with labeled vests.

Two decontamination tents will be deployed, each in front of the respective institutions ER ambulance entrance*. The tent in front of the KCH C building trauma bay holds fewer patients, but can accommodate stretchers. The decontamination tent for UHB is designed/set up for higher volume ambulatory patients. Both tents are staffed by trained personnel with PPE, and suit/equipment supporters directed by the Hamat commander.

The Simple Triage and Rapid Treatment (START) triage will be used. The standard four-color triage categories are used; red for immediate, yellow for urgent, green for minor injuries, black for deceased. Separate treatment areas are designated for specific types of injury, see appendix. Triage tags are made up of three copies. One,

* KCH tent will be in court yard 30 feet from ambulance bay. UHB tent will be on 37th street between Lenox and Clarkson. The UHB tent will be replaced by permanent showers in the ambulance bay when construction is completed.

of course stays with the patient, the triage officer keeps one, and one is given to the institution designated by triage at the time of arrival to that hospital.

The ambulance triage officer will have a recorder assigned to him or her, (a clerk, medical student, etc,) to keep track of names, if possible sex and approximate age, number of total ambulance patients, and how many went to each institution with a breakdown of adult, psych, pediatrics, etc. The Triage officers have radios to communicate to the ED, so that the above information is readily accessible.

Ambulance triage occurs away from the ER arrival bay, at the center of Clarkson Ave, so as to not congest access. There are two ambulance lanes, critical and delayed, in this way vehicles carrying higher priority patients will have unencumbered access to the ED. Ambulances approach from the west, stopping in front of the Medical school for triage. A senior resident or attending will perform ambulance triage. Rapid evaluation (30 seconds or less) consisting of 1) type of injury ex. Penetrating, burn, crush, etc. 2) Anatomic location ex. Head, torso, extremity. 3) vital signs as presented by EMS. The ambulance triage officer will then make a determination of 1) critical/immediate – open lane into ambulance bay of facility with the appropriate resources. 2) delayed – slower lane, waiting in line 3) walking wounded – ambulate to ambulatory triage.

The ambulance triage officer will proceed from vehicle to vehicle tagging or retagging the patients, and designating the facility. In general multi-trauma patients will be admitted to KCHC, and isolated trauma and ambulatory patients, patients with isolated extremity fractures and orthopedic injuries not requiring hemodynamic stabilization will be directed to UHB and KBJ depending on the institutions level of stress and patient volume.

Psychiatric patients and distraught patients who are medically stable will be triaged to KBSP. Hospital transport vans will be made available at the triage area to transport ambulatory patients to the other receiving facilities. Patients will be

decontaminated before being transported for obvious reasons. Communication between the command centers facilities will convey how many casualties are being directed to which institution and what types of injuries are to be expected.

Primary Triage and Patient Flow: All victims should be received through the ambulance entrance to the Primary Triage area.

Any disaster victim exposed to radioactive and/or other contaminated materials or poisons will be transported to the decontamination area prior to being transported to the general treatment area. (see HAZMAT Protocol)

The Triage Officer and Triage Nurse will assign patients at triage to one of the following categories:

Triage Priority and Tags:

- **Red:** Critical patients in need of immediate life-saving care
- **Yellow:** Relatively stable patients in need of prompt medical attention
- **Green:** Minor injuries that can wait for appropriate treatment
- **Black:** Deceased patients and those who have no chance of survival. These patients will be taken to a curtained off section of the ED and taken to the morgue.

From Primary Triage the patient will be taken to:

- **Major Casualty (Red and Yellow tags)** will be taken to the main ED

- **Minor Casualties (Green tags)** will be sent to the Fast Track area until it is overwhelmed. The suites will then be utilized as follows:
 - i. Suite B (Minor Trauma)
 - ii. Suite A (Minor Medical)
 - iii. Suite D (Minor Pediatrics)
 - iv. Suite I (Behavioral Health).

PRE-TRIAGE SCREENING POLICY: HIGHLY CONTAGIOUS/HIGHLY DANGEROUS INFECTIOUS DISEASES

Purpose:

In the event of a biological event that threatens the hospital community a pre-triage screening will be activated by the Incident Command Center (ICC).

The goals of the activation of the pre-triage screening is to prevent the spread of diseases such as SARS (Severe Acute Respiratory Syndrome), plague, smallpox, influenza, Ebola and other hemorrhagic fever viruses, as well as, any new emerging infectious diseases.

The University Hospital of Brooklyn will insure early detection and treatment of persons with these highly infectious agents, and interruption of their transmission to others by appropriate screening and adherence to specific precautions.

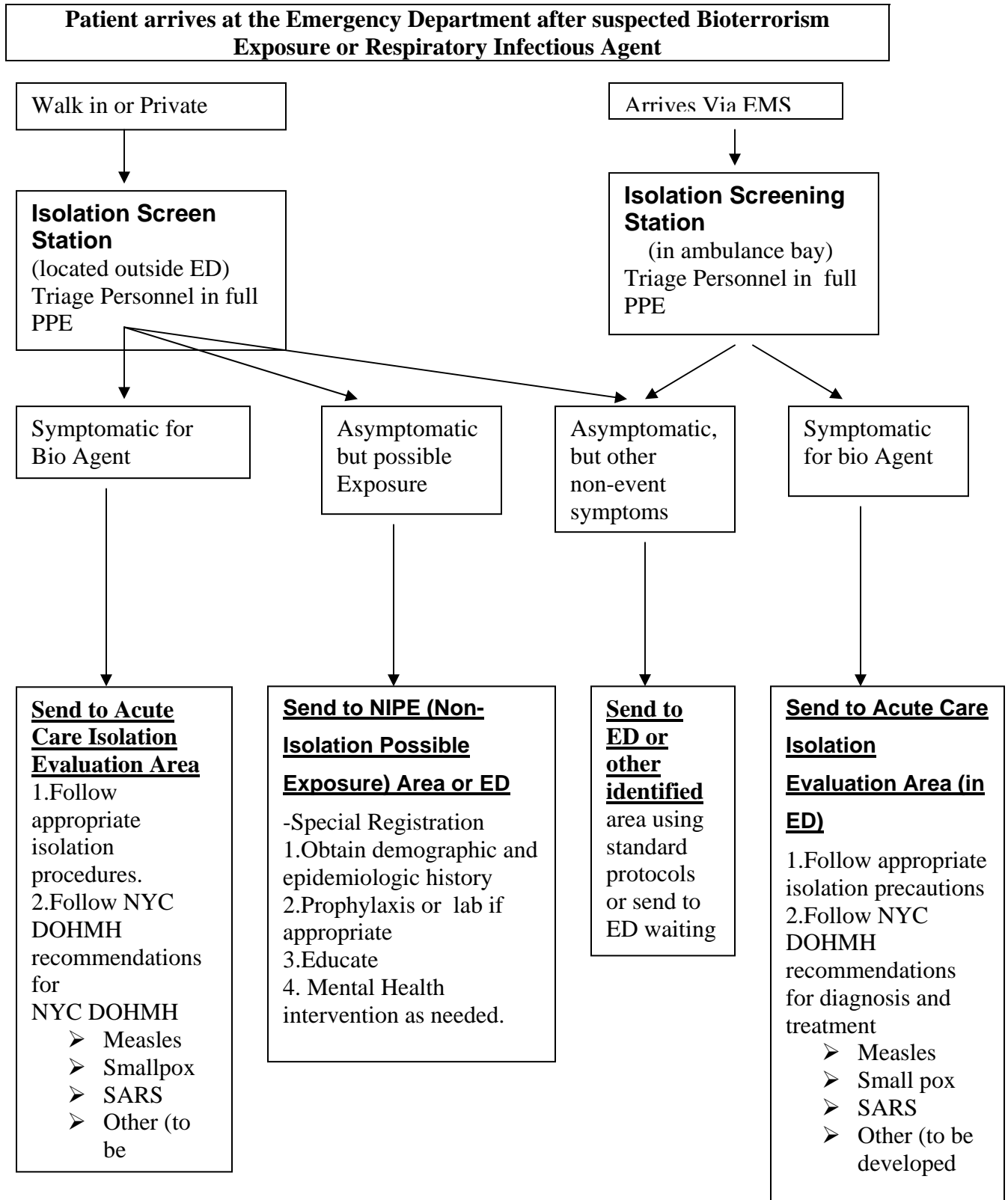
This policy provides a guide for pre-triage screening of highly contagious/highly dangerous infectious diseases,

Procedure:

1. Upon notification by the MCO the University Hospital Police will lock down all entrances.
 - All Entrances will be closed except the ambulance bay and the swinging doors on Clarkson Ave and Lenox Road. (employee use only)
 - The revolving door will be closed and the Hospital Police manning that entrance will move outside the facility in PPE to direct employee to the 445 Lenox Road entrance. Employees will be screened by nursing personnel (or other clinical staff) in conjunction with public safety before being permitted entrance to the facility. Employees who are ill/symptomatic will be referred back to the Clarkson Avenue entrance. Those who are not sick will have a sticker placed on their ID card by Public Safety affording them either unlimited institutional access or restricted

- access to critical areas. Decision regarding restrictions will be made by the ICC. Employees will be instructed to report to their stations unless otherwise instructed by their supervisors.
- The Director of Pharmacy or designate will be notified by the ICC that employee antibiotic prophylaxis may be necessary and will set up a dispensing station in the pharmacy offices in the basement of the hospital. A log will be kept of all employees receiving prophylaxis. Supervisory staff will be instructed to let their staff leave their work station in a staggered fashion to go to the pharmacy.
 - Ambulatory patients will be directed to the screening nurse and if necessary to isolation.
 - Clinic areas will be closed to normal functions at the direction of the MCO/Med Director/ AOD
 - Elective admissions will be cancelled at the direction of the MCO/Medical Director/AOD
 - Early discharge plan will be activated at the discretion of the MCO/Medical Director/AOD.
 - The only open University entrance will be at 395 Lenox Road where screening of staff for symptoms in a fashion similar to that conducted at 445 Lenox Rd will take place. Public Safety and Clinical staff assigned by the MCO or designate will conduct this screening.
2. At the Hospital Police desk inside of the swinging doors the RN and Hospital Police will be in PPE (level D) and establish if the patient needs isolation.
 - If the patient is in need of isolation (symptomatic) he/ she will be given a mask and directed to PED (Pediatrics) waiting area [Acute Care Isolation Evaluation Area]. In-depth triage will take place in the PED triage area. If the patient can be downgraded as a BT risk then they can go to regular waiting area or taken directly to the main Emergency Department (See diagram)
 3. For Ambulance patients there will be a RN or a Physician in the PPE at the ambulance entrance who will determine if the incoming patient needs to stay on a stretcher and/or needs isolation.
 - If the patient is in need of isolation (symptomatic) he/she will be masked in the ambulance bay and proceed to the acute care area-designated isolation rooms to be triaged and registered
(Diagram of isolation surge is attached)
 - If the patient does not need isolation but does need a stretcher the patient will proceed to the main Emergency Department and will be triaged and registered.
 - If the patient does not need isolation, or stretcher care the patient will go to ambulatory triage and proceed with registration
 4. In the event that the Emergency Department becomes overwhelmed the surge capacity plan will be enacted at the direction of the Incident Command

Center (MCO).



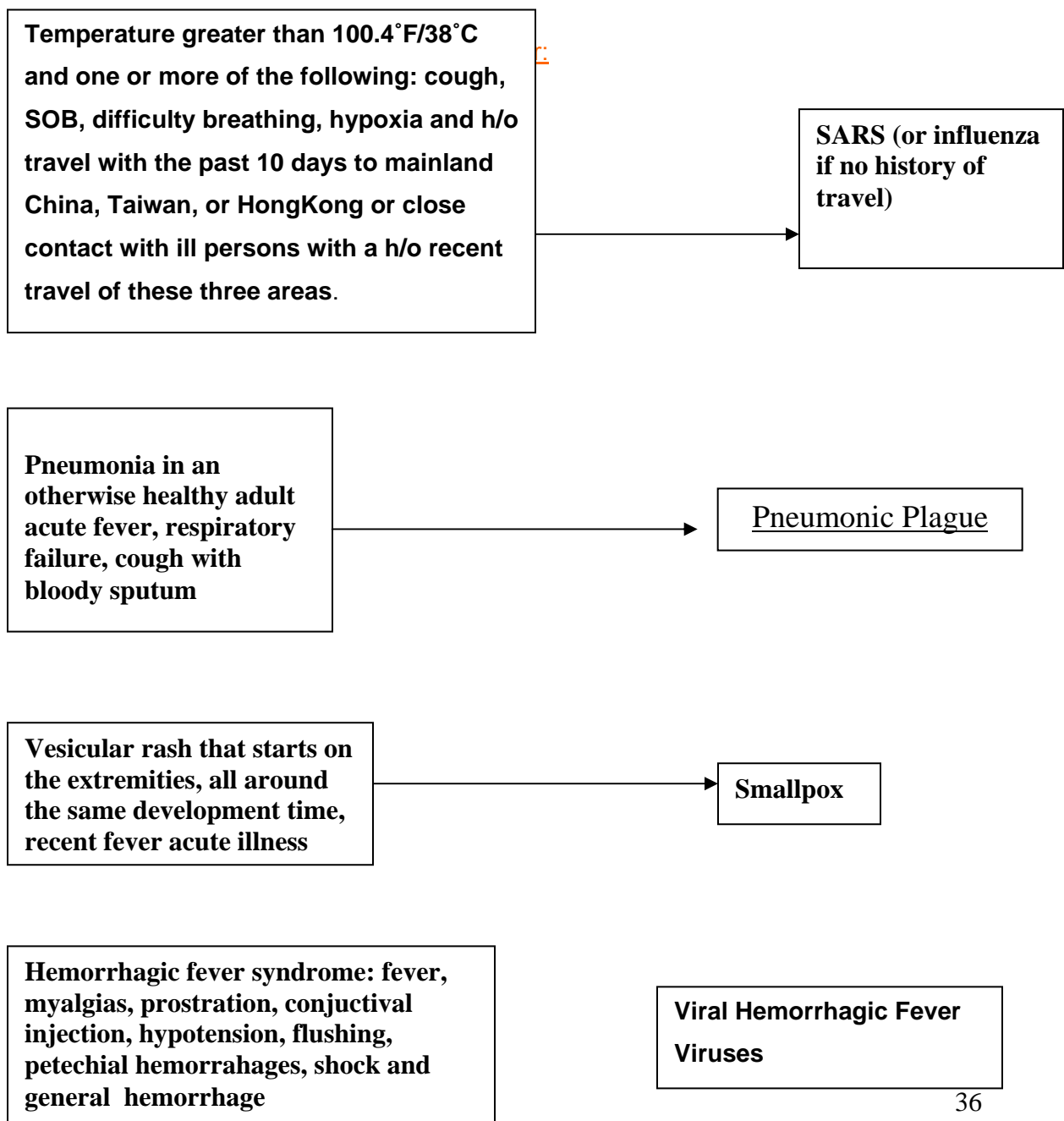
*** If Acute Care Isolation Evaluation Area overwhelmed-overflow to Adult Waiting Area. Asymptomatic patients for screening/triage will be directed to OPD Lab Waiting Area and out of the Adult Waiting Area.**

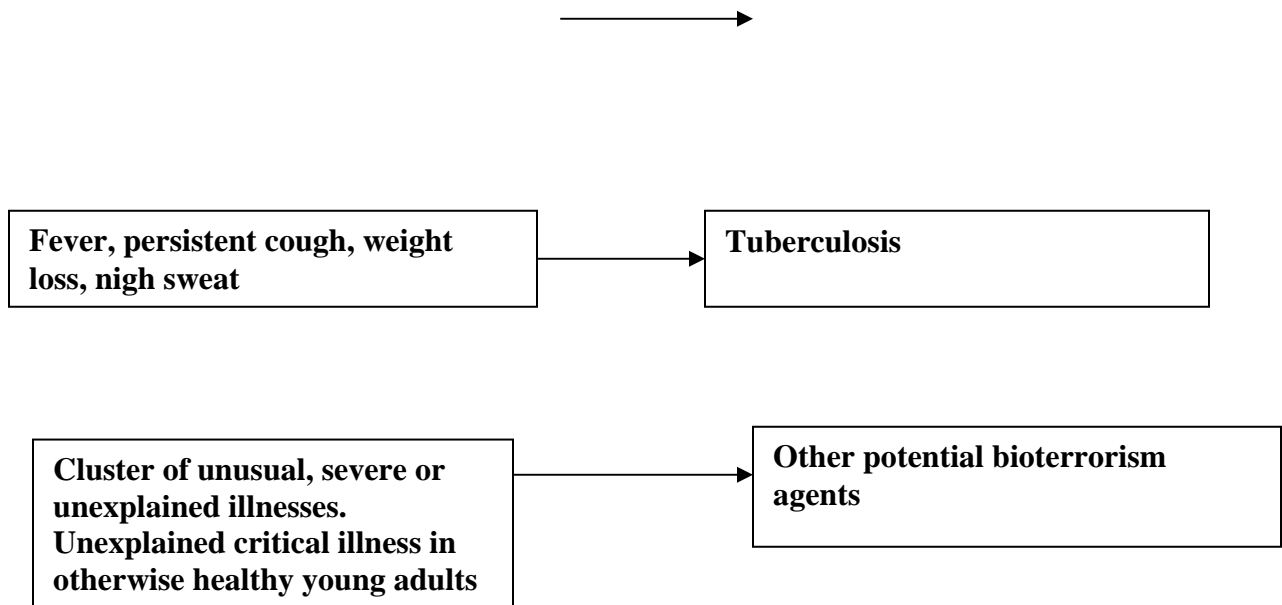
Admitting

Admit to respiratory isolation beds as needed

Activate Respiratory Isolation Unit (as per protocol) if needed.

Consider:





Signage:

Signs, stating the main signs and symptoms of significant conditions listed above, shall be posted in the triage/waiting areas. The purpose of the signs is to encourage incoming patients to report to the triage nurse, as soon as possible conditions that might require special precautions.

The signs will state:

- **TELL THE TRIAGE NURSE IF YOU HAVE FEVER, RASH AND/OR SIGNS OF BLEEDING**
- **TELL THE TRIAGE NURSE IF YOU HAVE FEVER, PERSISTENT COUGH, WEIGHT LOSS, NIGHT SWEATS**
- **SARS WARNINGS WILL BE POSTED IN MULTIPLE LANGUAGES AS THEY ARE PREPARED AND MADE AVAILABLE BY PUBLIC HEALTH AGENCIES**

Personal Protective Equipment:

If a nurse/medical staff member suspects that a patient has a disease that spreads by the air or droplets, he/she will immediately don an N95 particulate filter respirator. The patient will don a surgical mask (or non-rebreather oxygen mask if they cannot tolerate the surgical mask), and will be covered as necessary before being transported to an isolation room. If SARS is suspected, the staff member will also put on goggles and a protective gown/suit. The charge nurse and the ED physician in charge must be notified immediately.

Quarantine of the Receiving Area:

A patient suspected of having one of the conditions listed above should not be moved until it is safe to do so (patient covered/mask in place, clear path to an available isolation room). The area the patient arrived to and where he/she was assessed may be quarantined, or it may be used for triage/care of patients with similar diseases.

The ED attending in charge will make the initial and immediate isolation/quarantine decision. All ED personnel will don N95 masks and appropriate personal protective equipment. For SARS, this will include gowns/suits and eye protection.

Bioterrorism Act/Outbreak:

If a large-scale disease outbreak or Bioterrorism Act is suspected, the Hospital's Emergency Response Plan will be activated.

The Emergency Department will utilize the ED isolation rooms first. If needed, the Incident Commander will make a decision to convert to negative pressure some or all patient rooms on the 6th floor. Converted rooms will be utilized next.

The Incident Command Center may elect to utilize particular areas predetermined in the Surge Plan.

At the direction of the Incident Commander, Security will stop all non-essential personnel from entering the Emergency Department. They will take the name and phone number of everyone who was in the Emergency Department or waiting area at the time the patient or patients arrived.

If patients were placed in the common waiting room in the Emergency Department before their condition was recognized, the names of all patients, visitors and staff who may have been exposed to them will be recorded for appropriate follow-up as for the DOHMH's requirement.

If required to provide additional protective barriers against biological agents, Biomedical Engineering will collect portable HEPA filters (Microcons) and bring them to requested locations.

Notification and Report:

Infectious Disease, Infection Control, the Emergency Department and hospital leadership must be notified immediately should any suspected or confirmed case of smallpox, plague, SARS, viral hemorrhagic fever occur.

Those conditions must be treated as Public Health Emergency and immediately reported to the New York City Department of Health and Mental Hygiene at:

(212) 788-9630 during business hours
(800) 222-1222 during nights and weekends

B. IN-HOSPITAL

1. Transporting Patients

Patients should only be transported from the Emergency Department to the identified appropriate isolation rooms in the hospital. When patients are transported, they must wear a surgical mask for the containment of respiratory secretions, or a non-rebreather mask if they are oxygen dependent. The patient should also be covered with a sheet or a blanket, completely covering the body from the neck and including feet during transport.

Individual elevators should be designated for such patients. Security will assist with control of elevators.

Patients should not be transported to other areas of the hospital unless absolutely necessary.

2. In patients identified with a Highly Dangerous/Highly Contagious Disease

If an in-patient is identified with one of the conditions addressed by this policy, the following steps should be taken:

- a) The Infectious Disease and the Infection Control departments must be immediately contacted.
- b) All the traffic to and from the affected unit must be stopped.
- c) Staff must don the appropriate PPE
- d) PPE will be considered for patients and visitors that must remain in the area to reduce their risk of exposure.
- e) The department manager or his/her designee will collect the names and phone numbers of potentially exposed individuals before they leave the unit.

- f) The department manager or his/her designee will notify the administrator on duty who will determine the need for the activation of the hospital Emergency Response Plan.
- g) Patient will be transferred to a negative pressure isolation room on the same floor. If this is not possible, a private room with a HEPA filter unit should be utilized.
- h) Engineering will verify the inward flow of air in the negative pressure rooms.
- i) Outside agencies will be notified as appropriate by the FCC.

3. Outbreak

If a large number of infectious patients are identified, or are expected:

- a) The Hospital Emergency Response Plan will be activated.
- b) The rapid discharge of possible patients will be initiated.
- c) Nursing Station 62 will be evacuated, and will be prepared to receive contagious patients.
- d) Engineering will confirm by smoke test that this area is negatively pressured.
- e) Station 62 will be evacuated and prepared to receive contagious patients when station 62 is at capacity.

Appendix D: Microbiology Laboratory Protocol

Table. 1 Collection and Handling of Specimens Suspected to Contain Bioterrorism Organisms

ORGANISM	Disease		ACCEPTABLE SPECIMENS	Special Instruction	Specimen Receiving and Processing	REJECTED SPECIMENS		
<i>Bacillus anthracis</i>	Anthrax	Cutaneous	Vesicular fluid, Eschar’s materials	<div>1. Notify the microbiology laboratory before collecting and sending the specimen.</div> <div>2. Request, the name of person collecting and time of collection must be documented and must be accurate. A telephone and or pager number of physician must be included.</div> <div>3. Do not send suspected specimens with routine specimen. Send with messenger and obtain the signature of the person transporting the specimen. (You may chose a chain of custody form available in the laboorary or any log form you may have in your floor)</div> <div>4. When tissues are collected, they must be placed in sterile saline.</div>	<div>1.Document receipt immdeiately and notify supervisor and director.</div> <div>2. Follow standard operating procedure for setting up the culture, and presumptive identification</div>	<div>1.Swabs of any source</div> <div>2.Environmental, specimens from anounced event (Contact NYC health Dept directly)</div> <div>3. Incomplete</div>		
		Inhalational	Sputum, Blood culture					
		Gastro-intestinal	Stool, Blood culture					
<i>Brucella species</i>	Brucellosis	Blood culture, Bone marrow culture, liver or spleen biopsies .						
<i>Burkholderia mallei</i>	Glanders	Blood culture, urine, skin abscess, tissue aspirate, or sputum depending on the clinical presentation						
<i>Burkholderia Pseudomallei</i>	Mellioidosis							
<i>Francisella tulanrensis</i>	Tuleremia	Septicemic	Blood culture					
		Lympho-cutaneous	Tissue aspirate, biopsy or scraping from ulcer					

<i>Yersinia pestis</i>	Plague	Pneumonic	Bronchial wash, Transtracheal aspirate	5. Collect all specimens in sterile, leak-proof, screw cap container. Must contact the laboratory before sending the specimen. 6. Transport at R.T. immediately. If transport is not possible within 2 h., Store at 2-8°C if needed.	3. Must do so under biosafety cabinet (BSL2)	documentation 4. Improper packaging
		Septicemic	2 sets of Blood culture			
		Bubonic	Tissue aspirate or biopsy			
Botulinum Toxin	Botulism	Enema fluid, serum, stool or food samples	Follow all special instructions above	Do not attempt to perform any diagnostic test, Instead notify your supervisor and director immediately, so proper arrangement can be made with NYC-DOH. 212-788-9830		
Variola	Small Pox	Biopsies, vesicular fluid, or scabs	Follow all special instructions above			
Dengue fever virus Ebola virus Hanta virus Lassa virus Marburg virus Yellow fever virus	Viral Hemorrhagic Fever (VHF)	Serum				

Table 2. Recognition of Organisms Suspected In Bioterrorism.

Organism	Gram Stain	Growth On ¹			Key Biochemical Tests ²						Auto-ID. ³	If Criteria Present Proceed as Follows
		BA	Mac	Other	Ox	Ur.	Ca t	Mo t	X V	Othe rs		
<i>Bactillus anthracis</i>	Large Gram positive rod, encapsulated, sporulated and often in long chain	Non hemolytic, wavy border,(groud galss appearance), tencious.	No growth				P	N				B.anthraxis could not be ruled out. Must notify supervisor and director immediately.
<i>Brucella species</i>	Tiny, faintly stained, Gram negative coccobacilli ,	Small , non pigmented, non hemolytic, Punctate after 48 h.	No or poor growth	Small colonies on CA, TM	P	P (<2h)	P	N	N		Not R. Not S.	Brucella could not be ruled out. Must notify supervisor and director immediately.
<i>Burkholderia mallei</i>	Faintly stained, Gram negative rods may be slightly curved	No growth after 24 h. Smooth, gray, translucent after 48h	Light pink after 72 h.	PC agar Growth at 42°C: N	V	N		N		TSI: K/K		<i>Burkholderia mallei</i> could not be ruled out. Must notify supervisor and director immediately.

<i>Burkholderia pseudomallei</i>	Gram negative rods with bipolar staining	Smooth, creamy after 24 h, become dry and wrinkled after 48h.	Light pink or colorless after 24-48 h	PC agar Growth at 42° C: P	P	V	P	<u>P</u>		TSI: K/K		<i>Burkholderia Pseudomallei</i> could not be ruled out. Must notify supervisor and director immediately
<i>Francisella tularensis</i>	Tiny, poorly stained, pleomorphic Gram negative coccobacilli , which may resemble Haemophilus	May grow first, but fail sub-cultures on BA (Requires Cysteine)	No growth	Small colonies on BCYE, CA, TM.	N	N	W P or N	N	N	β-lact-emas e. Pos.	Not R. Not S	<i>F.tularensis</i> could not be ruled out. Must notify supervisor and director immediately.
<i>Yersinia pestis</i>	Plump shape (Bipolar) medium size Gram negative rods mainly single or short chains	Gray-white, translucent. Too small after 24 h. Opaque and fried egg appearance after 48 h. Colonies also described as hammered copper .	Small Non lactose fermenter	In Broth : Clumps, folccular, when settle looks like cotton fulff.	N	N	P	N	N		Not R. Not S.	<i>Y.pestis</i> could not be ruled out. Must notify supervisor and director immediately

Abbreviations:

1. Growth media: BA: Blood Agar, BCYE: Buffered charcoal Yeast Extract, CA: Chocolate Agar, Mac: MacConkey, PC: Pseudomonas Cepacia agar, TM: Thayer Martin,
2. Biochemical Tests: Cat: Catalase, Mot: Motility, Ox: Oxidase, Ur: Urease, XV: X and V factor requirement
3. Auto ID: Automated identification: Not R: Not reliable, Not S: Not safe

Note: All procedure must be performed under a biological safety cabinet.