

Stanford Hospital and Clinics & Lucile Packard
Children's Hospital Bioterrorism Response
Preparedness Plan (Updated 11/7/05)

Introduction

The Stanford Hospital and Clinics (SHC) & Lucile Packard Children's Hospital (LPCH) Bioterrorism Response Preparedness Plan was developed by the Bioterrorism Planning Task Force to prepare our hospitals and community for a bioterrorism event. The task force has representation from all relevant departments in both SHC and LPCH as well as representation from the University Environmental Safety Program and the School of Medicine Safety Office. The committee is tasked with coordinating our own disaster planning with Federal, State, County and Local directives in order to insure the highest possible level of safety for our patients, physicians and staff.

Reducing the incidence of transmission of infectious agents such as plague, smallpox and viral hemorrhagic fevers to staff, patients, and the community will depend on how rapidly victims, including the worried-well, can be triaged, diagnosed, isolated when necessary, and treated. Early communication with the local health departments will be essential in controlling or preventing disease transmission and providing public assurance. As information related to recognizing, diagnosing, treating, and preventing bioterrorism is updated at the federal and state level, this plan will be revised accordingly.

What is Bioterrorism?

Bioterrorism is the deliberate release of pathogenic microorganisms (bacteria, viruses, fungi or toxins) into a community. The most likely diseases associated with bioterrorism include anthrax, smallpox, botulism, plague, and tularemia. Additionally viral hemorrhagic fever (VHF) viruses such as Lassa, Marburg, and Ebola rarely, if ever, identified in North America, may be deliberately introduced. Other potential agents include brucellosis, western and eastern equine viruses that cause encephalitis, Q fever, glanders, and toxin-producing *Staphylococcus aureus*. With the

exception of small pox, VHF, and the encephalitis viruses, all bioterrorism agents can be treated with antibiotics or toxin antagonists if promptly diagnosed. Persons who received one or more smallpox vaccinations before the disease was declared eradicated worldwide have little or no immunity and virtually every living person in the world is now susceptible to the disease. There is no treatment for smallpox and, to date, there is a limited supply of vaccine available in the U.S. The above-mentioned diseases are not meant to be all-inclusive since there are many food- or water-borne agents that could potentially be used in a bioterrorist event.

Recognizing a Bioterrorist Event

The key to rapid intervention and prevention is to maintain a high level of vigilance. To minimize the number of casualties, early identification that an outbreak is from an unnatural source is essential. A bioterrorist event may be suspected when increasing numbers of otherwise healthy persons with similar symptoms seek treatment in our hospital emergency departments, physician's offices, or clinics over a period of several hours, days, or weeks. The early clinical symptoms of infection for most bioterrorism agents may be similar to common diseases seen by health care professionals every day. The principles of epidemiology should be used to assess whether the patient's symptoms are typical of an endemic disease (influenza) currently circulating in the community or an unusual event.

The task force strongly recommends early and liberal use of laboratory tests for the rapid diagnosis of influenza and other respiratory viruses (Direct Virus Exam Respiratory Panel). The most common features of an outbreak caused by bioterrorist agents include:

- A rapid increase (hours to days) in the number of previously healthy persons with similar symptoms seeking medical treatment;
- A cluster of previously healthy persons with similar symptoms who live, work, or recreate in a common geographical area;
- An unusual clinical presentation;

- An increase in reports of dead animals;
- Lower incident rates in those persons who are protected (e.g., confined to home; no exposure to large crowds);
- An increased number of patients who expire within 72 hours after admission to the hospital;
- Any person with a history of recent (within the past 2-4 weeks) travel to a foreign country who presents with symptoms of high fever, rigors, delirium, rash (not characteristic of measles or chickenpox), extreme myalgias, prostration, shock, diffuse hemorrhagic lesions or petechiae; and/or extreme dehydration due to vomiting or diarrhea with or without blood loss.
Responding to Anthrax Threats (Letters, Packages, etc.)

Please see October 22, 2001 recommendations from Santa Clara County Public Health Department (SCCPHD) titled, Alleged Anthrax Exposure: Guidelines for Physicians.

Physicians in the community should refrain from referring well patients to the Stanford Emergency Department for evaluation after an alleged biohazard exposure. They should follow the guidelines outlined by Santa Clara County.

In addition to the SCCPHD Guidelines, the following protocol is recommended for dealing with a suspicious package or letter discovered at Stanford University Medical Center:

- Do not open the letter.
- If the letter has already been opened and powder spills out, do not clean it up. Keep others away from the area.
- Put the letter down and leave the room.
- Immediately wash your hands with soap and water.
- Notify your supervisor, hospital security and local law enforcement officials (call 911).

- Page the Hospital Hazmat Team by calling Security and asking that the team be paged to your number. Hazmat Team members include: Per Schenk and Mirna Cintron. The direct pager is 16800.
- Evacuate the area.
- Ensure that all persons who have handled the letter wash their hands.
- Start a list of names and telephone numbers of all persons who have handled the letter.

Stanford Emergency Department Response to Bioterrorism (Note: A triage guideline for Stanford's Emergency Department regarding patients who have suspected exposure to bioterrorism agent(s) is presented in Suspected Exposure to Bioterrorism Agent Emergency Department Triage Guideline. Additionally, a triage guideline for Stanford University Medical Center's Clinics is shown in Suspected Exposure to Bioterrorism Agent Clinic Guideline.)

There may be many "walking well" patients reporting to the emergency department requesting evaluation and treatment for suspected exposure to a biological agent. Determining which patients have truly been exposed to a biological agent will be a formidable task. Therefore the following guidelines have been instituted to standardize our approach until better screening and diagnostic modalities become available.

Please note: These recommendations are subject to rapid change as the situation evolves and County and State policies are modified.

Well (Asymptomatic) Patients Reporting to the Emergency Department

1) "Well" Patient(s) arriving to the emergency department (ED) by ambulance (or preannounced) for evaluation after a potential biohazard exposure will be assessed in the parking lot adjacent to the ambulance bay by the ED Resource RN and/or an ED Attending wearing N95 masks, disposable yellow gown, and gloves and, if necessary, decontaminated using established guidelines will be completed.

2) The security guard posted at the metal detector outside the ED waiting room will screen all patients arriving on their own, and requesting access to the ED, to determine if they are seeking

evaluation for a biohazard incident. Patients who are identified by this mechanism will be assessed by the ED Resource Nurse or Attending Physician wearing N95 masks, disposable yellow gown, and gloves in the parking lot adjacent to the ambulance bay before the patient is allowed to enter the ED waiting room. Appropriate decontamination procedures will then be instituted if warranted by the situation.

3) In the event that decontamination is necessary, the ED will notify the Hospital Hazmat Team by calling Security and asking that the team be paged to the ED. The Direct pager is 16800; Hazmat Team members include Per Schenk and Mirna Cintron.

4) The Palo Alto Fire Department HAZMAT Unit will be called by calling 911 if additional resources are needed.

5) If local law enforcement agencies have not been alerted to the event, then they should also be notified by the ED staff.

6) After decontamination (if indicated) the patient will be brought into triage, registered and given a medical screening exam like any other patient.

7) If the physician suspects exposure with a bioterrorism agent they should contact the Santa Clara County Public Health Department. The local health department has the lead role in the early detection and identification of a bioterrorist event.

(408) 885-4214 (regular business hours)

(408) 229-2501 (after hours and weekends)

8) Unless we are notified otherwise by the SCCPHD, nasal swabs or other cultures will NOT be collected to screen for anthrax or other biologic agents in asymptomatic patients.

9) Demographic and epidemiological information will be obtained on each patient and documented by completing the Emergency Department Infectious Disease Exposure Epidemiology Tracking form. This form should be placed in the emergency department binder with the same title as

the form and should not be included with the medical record.

Sick Patients Reporting to the Emergency Department

1) A sick patient reporting to the ED, who is suspected of being symptomatic from a communicable bioterrorism agent, will be placed in isolation in Room 14 and infection control precautions will be used to reduce the risk of infection transmission as described in Infection Control Precautions for Suspected Bioterrorism Agent Disease.

2) The following individuals will be contacted immediately to facilitate management and to guide the evaluation, treatment and disposition of the patient

- a) Infectious Disease Fellow and Attending
- b) Infection Control Practitioner
- c) Santa Clara County Public Health Department (Health Officer on Call)

3) If at any time, the number of patients arriving to the emergency department (from a bioterrorism incident) exceeds the staff's ability to care for them with the resources available, a Code Zebra will be activated. (see below). Code Zebra (Activation of the Hospital's Bioterrorism Emergency Preparedness Plan)

A "Code Zebra" is the activation of the hospital's bioterrorism emergency preparedness plan. Members of the Infection Control Committee, Infectious Disease Department (ID Fellow and Attending), Clinical Microbiology Laboratory, Stanford University Biosafety Officer, Admitting, Media Relations, Security, and Environmental Health and Safety will be paged and called by Stanford Operators, and instructed to report to Radiology East for mobilization. Radiology East has been designated as the staging area for the hospital manpower pool during a Code Zebra. The Administrator on Call will be paged and will report to and activate the Disaster Command Center.

The individual(s) activating a Code Zebra will ensure that the Santa Clara County Public Health Department is notified.

Members of the response team, in consultation with the Santa Clara County Public Health Department and the ED Attending and Resource Nurse will determine what additional resources are needed and what action to pursue (Refer to the appropriate clinical pathway).

If necessary, a Code Triage (full activation of the Hospital Disaster Emergency Response Plan) will be initiated. This will be announced overhead as a "Code Triage."

Sick patients who are suspected of having Anthrax or other bioterrorism related infection, will have cultures and lab tests performed by our hospital lab under the guidelines outlined in the attached document titled: Specimen Collection for Suspected Bioterrorism Agent Diseases.

Role of Infection Control Practitioner

The hospital infection control practitioner (ICP) is going to play a significant role in the rapid identification of an outbreak of community-acquired infection and the notification of local health departments. The ICP is responsible for managing the day-to-day activities of the hospital-wide infection surveillance, prevention, and control program. Because the role is highly visible in the hospital and surveillance for infections is a primary function, the ICP is in a unique position to detect rapid or subtle increases in patients admitted with unusual clinical presentations. Daily surveillance of admissions to the hospital and to the ICU's is vital to the early recognition of a bioterrorism event. The ICP will review all admission diagnoses and microbiology reports several times each week. The emergency department and ICU should communicate any unusual infectious disease patterns to the ICP as soon as possible.

As a byproduct of this task force, a job action sheet for the Infection Control Officer has been created under the auspices of the Hospital Emergency Incident Command System (HEICS). The Infection Control Officer will report directly to the Incident Commander and has the responsibilities listed on the job action sheet (see attachment).

Decontamination of Patients and Environment

In most cases, patient decontamination will not be necessary for sick patients. The incubation period of biological agents makes it unlikely that ill victims of a bioterrorist event will present immediately following the exposure event. An exception may be an announced release of a bioterrorist agent, with gross surface contamination of victims with a confirmed agent

or material. In the cases where decontamination may be warranted, showering with soap and water is sufficient. If necessary, environmental surfaces can be decontaminated with a U.S. Environmental Protection Agency (EPA) registered sporicidal disinfectant or with a 0.5% hypochlorite solution (1 part household bleach added to 9 parts water). Bleach solution should NOT be used to decontaminate patients or pets.

Personal Decontamination will be done in accordance with existing Emergency Department Procedures and Stanford Hospital and Clinics and Lucile Packard Children's Hospital Hazardous Materials Response Program.

Primary Author: Eric A. Weiss, MD, FACEP

Chair, SUMC Bioterrorism & Emergency Preparedness Task Force