

Dean's Newsletter

October 29, 2001

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Response to Bioterrorism

During the past two weeks, a multidisciplinary Task Force on Bioterrorism and Emergency Preparedness has been constituted. Dr. Eric A. Weiss, Assistant Professor of Surgery (Emergency Medicine), is serving as Chair and has worked diligently with faculty as well as Hospital(s) and School Administration to develop a comprehensive preparedness plan. Although it is understandably lengthy, I am taking the liberty of including a nearly complete version of his report in this Newsletter so that every member of our community has the opportunity to become familiar with this information. I recognize that the information that follows has different degrees of relevance to readers. However, I am making the assumption that it is preferable to inform as many of our as possible, regardless of the specific role they might play in implementation. In sending this information, I want to thank Dr. Weiss and his colleagues for their diligence and commitment during this troubling period of human history and for making informative documents such as this available for our community.

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 influenza. Negative test results may alert health care providers to an unusual illness, and positive results should facilitate treatment with effective anti-viral medications.

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.)

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 Santa Clara County 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.
- Place the letter in one plastic bag (use gloves and a mask if available).
- 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, Jim Schweikherd, and Mirna Citron. 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.
- Place all clothing items worn when in contact with the letter into plastic bags
- Keep these bags with you, so that they are available for law enforcement officials

Stanford Emergency Department Response to Bioterrorism

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.

<p><i>Please note: These recommendations are subject to rapid change as the situation evolves and County and State policies are modified.</i></p>
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Well (Asymptomatic) Patients Reporting to the Emergency Department

- 1) "Well" Patient(s) arriving to the emergency department (ED) by ambulance (or pre-announced) for evaluation after a potential biohazard exposure will be assessed in the parking lot adjacent to the ambulance bay and, if necessary, decontaminated using established guidelines.
- 2) The security guard posted at the metal detector outside the ED waiting room will screen all patients requesting access to the ED to determine if they are seeking evaluation for a biohazard incident. Unannounced patients who are identified by this mechanism will be assessed by the ED Resource Nurse 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. Hazmat Team members include: Per Schenk, Jim Schweikherd, and Mirna Citron. The Direct pager is 16800. In most cases, patient decontamination will not be necessary for sick patients. The incubation period of biological agents makes it unlikely that victims of a bioterrorist event will become ill immediately following the exposure event. (see Decontamination of Patients and Environment)
- 4) The Palo Alto Fire Department HAZMAT Unit will be called by calling 911 if additional resources are needed.
- 5) Santa Clara County Health Department will be notified. 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)
- 6) If local law enforcement agencies have not been alerted to the event, then they should also be notified by the ED staff.
- 7) After decontamination (if indicated) the patient will be brought into triage, registered and given a medical screening exam like any other patient.
- 8) Unless we are notified otherwise by the County Health Department, 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 to facilitate recontacting the patient after discharge from the ED.

Sick Patients Reporting to the Emergency Department

- 1) A sick patient reporting to the ED, who is suspected of suffering from anthrax or other bioterrorism agent, will be placed in isolation and standard personal protective precautions will be taken to reduce the risk of infection transmission.

- 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 in necessary)
 - b) Infection Control Practitioner
 - c) Santa Clara County Health Department
 - d) Stanford University Biosafety Officer.
- 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 subsequently contact the Santa Clara County Health Department, and the Palo Alto Fire Department Hazmat Team (911).

Members of the response team, in consultation with the County Health Agency and the ED Attending and Resource Nurse will determine what additional resources are needed and what action to pursue.

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: Specimens to Send to the Clinical Laboratory in Suspected Bioterrorism Agent Disease.

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, simple washing 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.

Update on Interdisciplinary Programs: Bio-X/Clark Center and Bioengineering

One of the most distinguishing and exciting developments at Stanford is the ever-increasing move toward interdisciplinary efforts in research and education. One of the most notable of these is Bio-X and the Clark Center. As noted in earlier communications, progress and transition epitomize the Clark Center at this juncture. The overall building design is complete and evidence of continued progress is visible nearly daily. During the next months, decisions regarding the specific programs and investigators who will become the first occupants of the Clark Center will also be determined. This awaits the selection of the next director of Bio-X/Clark Center and the approval of the cognizant Deans from the Schools of Humanities & Sciences, Engineering, and Medicine. The Vice Provost for Research and Provost are fully engaged in this next important phase of the selection process.

Together with the Selection of the next Director of the Clark Center/BioX, the subsequent goal is to determine the ideal grouping of a small number of thematic affinity groups or centers that will foster interactions within the Clark Center itself, attract faculty and students to the Center and engage in collaborations throughout the University. On Saturday, October 13th, the Deans heard wonderful presentations from faculty who have been engaged in potential project development for the Clark Center/Bio-X. It is anticipated that during the next weeks, additional proposals will be reviewed and the most promising and interactive centers selected. The transition from a focus on individual investigators to one that addresses the benefits of programmatic centers which serve as incubators, facilitators and collaborators offer the next important stage for the Clark Center and Bio-X. Exciting times are ahead.

In related but distinct efforts, I am pleased to inform you that continued progress is being made in our pursuit to develop a joint bioengineering program with the School of Engineering. Recognizing that discussions about this have been underway for a number of years, considerable progress has been accomplished within the past several months. Based on oversight meetings with the Deans of Engineering and Medicine, along with Drs. Jeff Kosoff from Engineering, and Drs. Paul Yock and James Nelson, from Medicine, efforts to develop a joint Department of Bioengineering are being considered. Further support for this concept has emerged from faculty retreats held by each School individually (with joint representation), each concluding that there is merit to proceeding to the development of a joint Department. A target date for concept approval has been set for late November. If we are successful in laying the correct groundwork, this could become the first joint department of bioengineering between a School of Engineering and Medicine in the country. Not only would that be an important accomplishment in its own right but more importantly, it would foster a collaborative

environment for undergraduate and graduate education as well as in interdisciplinary research. Indeed, the relationship between these joint efforts in bioengineering and the Clark Center/Bio-X should not go unnoticed.

Discussions with Medical Student Leadership Regarding Family Medicine

During the past several months there has been considerable discussion, debate and opinion regarding the status of Family Medicine at Stanford and, in particular, its role in medical student education. The debate was fueled by a decision I made, in May, to join the Divisions of Family and Community Medicine and General Internal Medicine, both of which resided in the Department of Internal Medicine. The goal was to create a larger critical mass of faculty that could further enhance the education of our students and promote new avenues for research. While the goal was, in my opinion, meritorious, the success to date has been less than what was hoped for or expected. I have also received an expression of concern from the Committee on Courses and Curriculum.

Accordingly, a discussion was held with Stanford Medical Student Association leaders and representatives on Thursday, October 18th, along with Dr. Julie Parsonnet, newly appointed Senior Associate Dean for Medical Student Education, Dr. Neil Gesunheit, Associate Dean for Medical Student Education, and Dr. Sam LeBaron, Associate Professor of Medicine (Family and Community Medicine) at Stanford University Medical Center.

In this meeting I underscored the School's commitment to sustaining and enhancing the highly valued and important clerkship in family medicine. It had been my hope that the newly defined merger could improve the already excellent clinical experiences offered to our students by family medicine faculty and staff. I also underscored that the perception that the merger "devalued" family medicine was not my intent. Although, I had been aware of the viewpoint that the overall academic development of family medicine had been limited by being a division, I also recognized that a departmental structure was not feasible at this time, especially given our current resource constraints. It was because of this that the concept arose for combining resources of family and general internal medicine in order to enhance the overall academic mission of both divisions. Although the newly merged division has been in place for several months, and while faculty and staff from both family medicine and general internal medicine are certainly seeking to do the best they can for our students, it is increasingly clear that both students as well as faculty, staff and community colleagues are less than satisfied with the current organizational structure.

Obviously, at such a juncture, the key question is whether continued efforts by faculty and students could make the current merged program work more successfully. Based on the input I have received, from a variety of sources, this seems unlikely. While my intent was never to offer the perception that one medical specialty (e.g., family medicine or general internal medicine) was less valued than others, this seems to have occurred. I certainly apologize for that perception – it was not my intent. Accordingly, we will explore other options. However, the boundaries for these do not include a new department. Other alignments will be considered and, at its essence, we will do everything possible to assure the valued clinical elective provided by family medicine faculty and staff is sustained.

This is an interim report. Additional details will be provided as they unfold. During this process I hope to engage the continued cooperation and support of our faculty and students.

Executive Committee Update: Children's Health Initiative (CHI)

At the October 19th Executive Committee, Dr. Alan Krensky, Professor of Pediatrics and Director of CHI, gave a presentation of the history, current status and future expectations of the CHI. He noted that in November, CHI will be officially announced in conjunction with the 10th Anniversary Celebration of the founding of the Lucile Salter Packard Children's Hospital (LPCH). The goal of the presentation was to inform the Executive Committee members about what CHI is and it is not – especially given the multiple phases of its history and evolution.

Because the official announcements about CHI will be part of the 10-year celebration of LPCH now scheduled for November 15th (having been rescheduled from the originally dates due to the tragic events of September 11th), I will only provide a very truncated description at this time. The fundamental message, of course, is that CHI represents an extraordinary opportunity for LPCH and Stanford Pediatrics to achieve enormous prominence and sustainability during the next decade and beyond in child health and pediatric research. This is due to the remarkably generous gift of the Packard foundation, that when completed, will provide approximately \$500 million during the next 10 years to develop outstanding programs in clinical care, research and education as well as facilities at LPCH and Stanford. This mandates enormous stewardship by the leadership of CHI, LPCH, the School of Medicine and the Foundations providing this exceptional support.

At the same time, it is also essential to manage the expectations surrounding the timelines of the CHI effort. Although it is important to underscore that although the ultimate \$500 million gift and grant for CHI is due to a combination of direct gift support from the Packard Foundation coupled with a matched fundraising effort, it is critical to make clear that these funds do not, at the moment, exist in the aggregate. That is because of the matching support fundraising effort that will be carried out by the Lucile Packard Foundation for Children's Health which will complement the gift provided by the David and Lucile Packard Foundation to LPFCH for the CHI. It is anticipated that with the successful matching, the yearly funding that will be available for program development will be approximately \$30 million per year, a large portion of which will be allocated as endowment support for specific program areas. This further means that while a number of important opportunities have already been identified, the timeline to achieve them will be measured in years and will surely be influenced by areas of opportunity. Thus, while a long-range plan has been developed and will be constantly refined, it is important to recognize that the ultimate fulfillment of this plan will unfold gradually during the decade ahead. Nonetheless, this represents an unparalleled opportunity to develop a pediatric program of enormous importance and that will serve our community, LPCH, Stanford and the world, if done with the excellence and care that must now occur. Accordingly, it is important to engage the critical acumen, knowledge and commitment of our faculty leaders – both those already focused on child health and those whose expertise and knowledge from other disciplines can help the CHI effort to be as successful as it can possibly become.

Needless to say, more details will follow on this very important topic and initiative.

Meetings and Gatherings

Cardiothoracic Surgery Faculty Meeting. On Monday, October 11th I had the pleasure to participate in the CT Surgery Faculty meeting. I want to thank Dr. Bruce Reitz for inviting me to attend the meeting and for the faculty who raised important questions regarding the projected clinical strategic initiatives that have been established for CVS, the impact of the recruitment of pediatric CT surgeons, the role of the Operating Room Director, and the overall financial performance of the department and the hospital.

Boston “On the Road” Event. On Tuesday evening, October 23rd, I had the opportunity to address Stanford Medical Alumni living in Boston and the greater New England area. This was the third such annual event sponsored by the Office of Alumni Relations and hosted by Dr. Ross Bright, Associate Dean for Alumni Affairs. The event provided an opportunity to meet with recent as well as past Stanford graduates and to inform them of the changes occurring at the Medical School and Medical Center. I shared the current outlines of our now ongoing strategic planning efforts and how this will impact on new program development and our Stanford Medicine Capital Campaign in the second half of 2002.

Special thanks to the Office of Development and Alumni Relations, especially Kaleo Waxman, Charlie Brown and Andrew Cope, for making the evening so successful.

Pediatric Drug Testing

A sad reality during the past decades has been the inadequate development of drugs for infants and children. Indeed, through the present, nearly 80% of drugs currently in use have had no testing in children. This had significant negative consequences during the early AIDS era but also has negatively impacted the ability to adequately develop new agents for numerous other pediatric illnesses. Because of this, a number of groups and foundations have worked to improve drug availability and clinical research in children. This had a major impact in 1997 through the FDA Modernization Act. However, the past year has witnessed some pushback on pediatric clinical research in the lay press in general and the resultant real possibility that the current program which provides incentives to the pharmaceutical industry to permit drug testing in children might not be approved. The consequences for pediatric clinical research should that happen would be enormous. I am pleased to say that a number of individuals at Stanford and LPCH are helping to prevent that from occurring. Dr. Charles Prober, Professor of Pediatrics and Scientific Director of the Glaser Pediatric Research Network and Dr. Harvey Cohen, Professor and Chair of the Department of Pediatrics have been particularly important in advocating for approval of the bill to sustain incentives for pediatric drug testing. I have worked with Drs. Prober and Cohen along with the Elizabeth Glaser Pediatric AIDS Foundation and the Health Policy Board of the Institute of Medicine to advocate for the passage of the bill. I am happy to say that this past week the US Senate passed the pediatric testing bill that extends the highly successful incentives for testing of drugs for use in children. Senate passage is a big victory for

kids, but the job is not done. The next steps will be to pass the bill in the House, reconcile the House and Senate bills, and then send the bill to the President for his signature.

Depending on the next steps we may wish to call on your advocacy as well.

Congratulations

Philip Sunshine, M.D.: On Sunday, October 21, 2001, Dr. Phil Sunshine, Professor of Pediatrics, received the Virginia Apgar Award from the Section on Perinatal Pediatrics of the American Academy of Pediatrics. One of the founding fathers of neonatology, Dr. Sunshine has made significant and enduring contributions to science in addition to being an outstanding clinical neonatologist and teacher. He was, for example, the first to describe the relationship of neonatal thyrotoxicosis to the long-acting thyroid stimulator that was subsequently shown to be thyroid-stimulating immunoglobulin. He has been a pioneer in the early study of mechanical ventilation and its impact in the treatment respiratory distress syndrome. His background in biochemistry also led him to contribute new knowledge to the study of metabolic diseases of neonates, including the first description of a child with ornithine transcarbamylase (OCT) deficiency. Equally importantly, Dr. Sunshine has been a wonderful educator and a national leader in pediatrics, serving in numerous leadership roles. Perhaps most importantly, he is deeply admired by his colleagues and students for his integrity, commitment and humanity.

Congratulations to Dr. Phil Sunshine.

Halstead R. Holman, M.D.: The American College of Rheumatology has bestowed its highest honor, the Presidential Gold Medal, upon Hal Holman, the Berthold and Belle N. Guggenheim Professor of Medicine. Given once each year, this award recognizes the individual, who in the opinion of the College has demonstrated a career-long mark of excellence to research, clinical work, and teaching in medicine and rheumatology. Dr. Holman's career, which now spans nearly 50 years, includes the initial studies of role of anti-nuclear antibodies in rheumatologic diseases. The award also recognizes Dr. Holman's leadership in the development of a scientifically excellent faculty in the early development of the Department of Medicine when the School first moved from San Francisco to Palo Alto in the early 1960s. He is also acknowledged for his teaching abilities, clinical excellence and commitment to the care of adults with chronic disease.

Congratulations to Dr. Hal Holman.

David B. McKay, M.D., Ph.D.: Professor of Structural Biology, has been elected a Fellow of the American Association for the Advancement of Sciences for his crystallographic and biophysical studies that have provided insights in macromolecular structures and mechanisms of microbial virulence factors, molecular chaperone proteins, and catalytic RNAs. He joins 28 other Stanford faculty who have been elected Fellows of AAAS in recognition of their scientific contributions.

Congratulations to Dr. David McKay

Appointments and Promotions

Bishr Omary has been promoted to Professor of Medicine
(Gastroenterology/Hepatology), effective 10/1/01

Congratulations to Dr. Omary