



University of Pittsburgh

*Graduate School of Public Health
Center for Bio- Terrorism Response*

130 DeSoto Street
Pittsburgh, Pennsylvania 1526
412-383-7985/7475

31 October 2000

The Honorable
James S. Gilmore III
Governor
Commonwealth of Virginia
Chairman, Advisory Panel to Assess Domestic Response Capabilities for Terrorism
Involving Weapons of Mass Destruction

James Clapper, Jr.
Lieutenant General, United States Air Force (Retired)
Vice Chairman, Advisory Panel to Assess Domestic Response Capabilities for Terrorism
Involving Weapons of Mass Destruction

Dear Governor Gilmore and General Clapper:

Thank you for the opportunity to attend the Panel's meetings on 28-29 September 2000 at the Library of Virginia in Richmond. Please distribute my comments to the Panel and make them a part of the Public Comment section of your deliberations. My comments are offered as an alternative assessment of the medical and public health capacities needed to prepare for and respond to terrorist attacks, and more specifically to attacks by terrorists using biological agents. I have also included comments on the organization and structure of government.

My comments are based on my current role as Director for Bioterrorism Preparedness and Response at the Graduate School of Public Health at the University of Pittsburgh and as Co-Director of the Bio-Medical Security Institute -- a collaboration of Carnegie Mellon University and the University of Pittsburgh with the mission of advancing the capability to detect, analyze, prevent and respond to acts of terrorism and natural events involving biological agents.

They are also based on my twenty-five year involvement in senior interagency national security issues in Washington, including four years in the White House as an advisor on national security issues to Vice President Bush and as a consultant to the Army Office of the Surgeon General and the Office of the Secretary of Defense on chemical and biological warfare and terrorism medical and public health defense and responses.

Public Health and Medical Preparedness and Response to Terrorism

Terrorism has moved away from kidnappings and assassinations towards having the capability to employ chemical, biological, radiological and nuclear (CBRN) weapons. It has moved from focused targeting and few casualties to the possibility of indiscriminate use of CBRN and mass casualties. The diffusion of technology and scientific knowledge and the possibility of materiel, scientists and knowledge leaking from the former Soviet Union have increased the threat and the possibility that we may soon see terrorists using CBRN against civilian populations.

It is important to recognize that there is a clear distinction among the types of agents that could be used: chemical, biological, radiological and nuclear. The distinctions are most clear when one considers the primary functions in countering attacks: Planning, Detection, Response, Containment, and Follow-up. In your deliberations as a panel, you may want to consider using such a framework for assessment of the capabilities and needs of Federal, State and local preparedness.

The functional preparedness and response distinctions among the types of weapons (CBRN) are most significant when considering Detection, Response and Containment. The physical properties of the agents dictate this. The effects of most chemical attacks, in the main, are immediate, visible and can be smelled, and the victims reaction is immediate and at the scene of the attack. Thus the role of first responders.

The silent and secretive nature of a bio attack and the delayed onset of illness following a bioterror attack results in victims being seen some days later by primary care physicians, clinicians and infectious disease specialists and in emergency rooms. Responding to a bioterror attack requires medical and infectious, possibly contagious, disease treatment, epidemiological investigations, hospital and non-hospital care for very large numbers of patients (in a worst case, tens of thousands), psychiatric and stress management responses, and information from public officials. In a chemical attack, the numbers will usually be far fewer due to the amounts of agent needed, and more localized. Many victims of a chemical attack will be treated as hazardous materials and bum victims, as no infection or contagious disease spread is possible. Finally, containment of a bioterror attack requires infection control in medical facilities, contagious disease precautions and identifying a large population at risk. In a chemical attack, decontamination is the major containment measure.

Biological terrorism is considered a low probability, high consequence event. It could be further categorized in two scenarios: if there are a small number of victims the consequences, in addition to medical and public health, are policy and law enforcement issues; for a scenario with large numbers of victims the responses are mostly medical and public health issues, and the need for immediate and massive critical care. From this one can see the logic of building a bioterrorism response capability around and on the existing medical (treatment of individuals) and public health (protecting the health of the community and preventing the spread of disease) system. All said, a new infrastructure

for responding to bioterrorism is not necessary. Building on the excellent medical and public health capabilities in our country is the prudent and sensible course.

As for the diseases against which to prepare, there was discussion during the Panel meeting of smallpox. It may be of some benefit to include mention of the other diseases on the Centers for Disease Control's A, B and C lists (*Morbidity and Mortality Weekly Report*, Biological and Chemical Terrorism: Strategic Plan for Preparedness and Response, April 21, 2000). In this regard, I do not think that a bioterror attack will be a "stuttering attack," in which many diseases unfold over time due to different incubation periods. While anything is possible, for a non-state-sponsored terrorist, it is technically hard enough to mount an attack using one biological agent, let alone several. Most credible threat analyses predict an attack using only one agent. The technology and scientific proficiency needed to prepare, manufacture and disseminate one agent is hard enough, without attempting to mount an attack with several agents simultaneously.

As for improved surveillance, recognition and identification, the individual practitioner is essential, as was discussed by the presenter, for diagnosing individual patient symptoms. A bioterror attack, if conducted efficiently and effectively, will be unknown to medical, public health and law enforcement officials until well after the event. Early warning of an attack will be detected not by an individual practitioner treating one patient, but by determining patterns of symptoms in real-time over a large number of patients, over large geographic areas, correlated by case definitions and algorithms, supported by real-time analysis of electronic patient medical records and electronic laboratory results. This can be accomplished by an integrated, real-time automated Internet-based system where symptoms are entered into a patient's electronic medical records by the clinician as each patient presents his illness. (I must note that the BioMedical Security Institute (of which I am co-director) -- a collaboration of Carnegie Mellon University and the University of Pittsburgh with the mission of advancing the capability to detect, analyze, prevent and respond to acts of terrorism and natural events involving biological agents -- has received funding from the Centers for Disease Control and the Agency for Healthcare Research and Quality to study and develop symptom and syndromic surveillance systems based on information technology.) With a national networked symptom and laboratory-based computer-based surveillance system, early warning of a bioterror attack can be determined and health authorities notified.

The matter of patient medical records and patient confidentiality (privacy) is an issue of considerable concern. For medical purposes, each patient's privacy must be respected. When patients are accumulated into public health data, individual patient identifiers can be removed to assure privacy. The problem is that as patients are identified as victims of a bioterror attack, it is necessary that the larger population at risk be identified so that rapid preventive treatment may preempt further illness or death.

As for the discussion of human testing in the proposed report, I would caution the Panel away from this issue. There are no reasons to conduct testing of biological agents and medical response and treatment measures on humans.

As for indemnification of private entities such as HMOs, public and private hospitals, even schools used for overflow bed space for patients, this issue is fraught with constitutional issues as relate to Presidential authorities to declare national emergencies.

In sum, the Panel may wish to consider the following health recommendations for inclusion in its report:

Recommendations

1. Encourage the Centers for Disease Control, the Agency for Healthcare Research and Quality and the Defense Advanced Research Projects Agency in their support of the development of information technology tools that can be applied to early warning of bioterrorist attacks against civilian populations.
2. Encourage CDC to expand the National Emergency Disease Surveillance System (NEDSS) to reach down to the city and county level to provide for early warning of unusual disease outbreaks and resolve public policy issues so that the system may be expanded to reach clinicians' offices via a real-time electronic Internet linkage of symptoms and laboratory results, diagnostic and clinical coding and insurance billing.
3. Encourage JCAHO to include planning for massive infectious disease epidemics in its criteria for assessing hospitals.
4. Encourage development of public policy for the role, funding and compensation of HMOs and public and privately held medical facilities responding to terrorist attacks.

National Strategy and White House Policy

The issue of whether or not the current Administration has a strategy for preparing for and responding to terrorism, as was discussed at the September meeting of the panel, goes to the issue of how a particular President organizes his Administration for national security decision-making. A strong central National Security Council staff can function in such a way as to accomplish coordination. The Panel's discussion of having a White House office similar to the National Drug office is worthy of inclusion in the Panel's report.

On the other hand, very careful consideration is needed so that no operational, law enforcement or intelligence functions be in the White House or the Executive Office of the President. While there is a need for a national office for countering and responding to terrorism, its placement, as an operational organization within the OEP structure must be very carefully thought through.

Similarly, as for the need for a national intelligence officer for terrorism, to collate and analyze both domestic and foreign terrorist intelligence is a commendable concept and must be accomplished, given the fluidity of terrorism across national borders.

Recently General Clapper and I met and evolved a possible solution to the report: seeming inability of this Administration to coordinate the domestic preparedness responses of the departments and agencies of the government in response to acts of terrorism. As illustrated in the Panel's 15 December 1999 report, the bureaucratic structuring of the government leads to

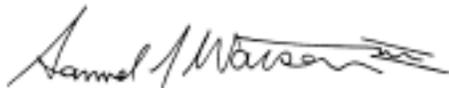
chaos. The domestic preparedness and emergency preparedness planning and coordination functions in the various departments and agencies are fragmented and often an afterthought and an added duty. A single point of contact in each department and agency for emergency preparedness planning and coordination (domestic preparedness for terrorism response) with no added duties, nor as an added duty, provides a simple and clear approach and clear lines of responsibility. This person, at the White House level and in each department and agency should be at least at the deputy assistant secretary level.

The Panel may wish to consider the following recommendation for inclusion in its report:

Recommendation

Each department and agency and the White House Staff (National Security Council staff) should have a single point of contact whose sole function will be emergency preparedness, planning and coordinating of domestic preparedness for terrorism response functions with no added duties, nor as an added duty, at least the deputy assistant secretary level.

Sincerely,

A handwritten signature in black ink that reads "Samuel J. Watson III". The signature is written in a cursive style with a long, sweeping underline.

Samuel J. Watson III
Director