

MEMORANDUM

TO: Dr. Ron Kendall

FROM: Admiral Zumwalt

DATE: January 28, 1999 *sent via e-mail - 1-29-99*

SUBJ: Z-2 *ZJ*

I attach a proposed concept which I would ask you to call me concerning as soon as possible.

From: sjones <sjones@darpa.mil> /
To: "Elmo R. Zumwalt"
Subject: For Texas
Date: Sun, 24 Jan 1999 19:21:25 -0500

Remove
Shaun Jones
contact info

How about something along these lines...

out

The following presents a strategy related to emergency preparedness and biological threats. The components include persons with expertise in the scientific validation of an incident (e.g. rapid multi-array sensors, establishing relevant data base, data fusion, data presentation); communication (informing appropriate governmental persons and the general public about the incident); health care and triage related to the care of affected persons; developing a system that can integrate the detection and responses in a coordinated manner.

There are four thrust components required:

- 1) sensors for scientific validation of a possible biological/chemical incident;
- 2) medical treatment and care of affected persons (e.g. triage, quarantine, transport)
- 3) communication so that appropriate action is taken by authorities with minimal social panic
- 4) development of an integrated system

Multi-array sensors for detection and identification of biological agents: The time interval between exposure of persons to a biological agent and the development of clinical signs is between 17 hours to 72 hours for the agents of concern. One requirement is therefore the development of multi-array sensors and detectors (point and stand-off) that can detect and identify B threat agents rapidly and with high accuracy.

Since the threat agents occur naturally in the world, the sensor systems must have the capability of graded responses. This implies the development of database that will permit establishing thresholds in particular environments; signals above threshold imply a state of concern. The sensors must have sufficient false positive and false negative elements to provide fidelity in the detection and identification task. Expertise in the area of multi-array sensors and integrated systems for converting large scale data sets to information exist at the University of Texas-Austin and the University of Wisconsin-Madison. To test the efficacy of newly developed multi-array sensors it is necessary to have genomic and immunogenic components of likely B agents. The Institute for Environmental Human Health Sciences at TTU in Lubbock TX has the infrastructure to develop BL 3 and BL 4 facilities for producing and maintaining a supply of such genomic and immunogenic materials. Medical Prevention of Infection and Medical Treatment and Care Following Infection: To prevent infection of persons in an environment containing dispersed B agents, one approach is the development of body coverings that bind or otherwise inactivate B agents. Alternatively one can develop novel immunization methodologies or novel anti-virals, antibacterials and anti-fungal compounds. To block the development of clinical signs in persons infected with biological agents one can utilize novel compounds that inhibit cell death and subsequent release of infectious virus particles. Research directed toward these ends will markedly reduce the threat of biological attack and provide protection. Conventional medical treatment of exposed persons may then be initiated.

The Fabric Center at TTU can serve the complementary role of developing novel body covering to bind B agents or otherwise inactivate such agents. The Medical Center at UT Lubbock can

provide a facility to test medical triage strategies outlined above. The Austin Texas area has the advantage of an active Dept Justice program (Kathi West is on a primary Emergency Response panel of Attorney General Reno), a well trained and funded Emergency Response Medical Team (Steve Collier Directs this effort and was a recent funded element from DoJ), a very skilled Texas Dept of Health center (Michael Perrotta was member of IOM panel report Chemical and Biological Terrorism). In addition Steve Kornguth (PI of the anti-viral DARPA funded project of the Unconventional Pathogen Protection Program) and Robert Shope (PI of a second DARPA funded effort) are located in this region. These groups working together can provide the critical knowledge base, technologies and infrastructure necessary to address the threat of B agent attack.

Communications following a B agent Attack The College of Communication at the University of Texas together with Public Strategies Inc. has identified a team of appropriate experts to examine the appropriate policies for communicating response to a chemical or biological event. This team will examine the structures and policies of government agencies charged with responding to such events; the commercial and public media organizations and their attendant professional associations for establishing diffusion guidelines and information networks; and organizational and message strategies for communicating to the wider public while avoiding mass panic.

Etc