



# The Beacon

## BY AND FOR EMERGENCY RESPONDERS

### NDPO RECEIVES FUNDING

In January 2001, the NDPO received a reprogramming for an operational budget. The money will be used by the NDPO to fund the coordination of several NDPO and federal interagency projects for the emergency response community.

The NDPO also received funding from the Department of Justice's Working Capital Fund that will be used to relocate the office from FBI Headquarters to a new site in the Washington, D.C. area.

We'll keep you posted in future *Beacon* articles about funding, the office relocation, and WMD preparedness projects.

### ASSESSING HOSPITALS AND LOCAL HEALTH DEPARTMENTS EMERGENCY PREPAREDNESS TO A BIOTERRORISM EVENT – ILLINOIS' EXPERIENCE

By Leslee Stein-Spencer, R.N., M.S.

Recognizing the potential threat that bioterrorism poses to the country's population and anticipating the varying degrees of readiness that state and local health departments would bring to response efforts, the US Centers for Disease Control and Prevention announced in March 1998, the availability of funds for cooperative programs aimed at upgrading the response capabilities of state and local health departments.

The Illinois Department of Public Health (IDPH), which was awarded one of these grants, used the funds to support a number of activities, including an assessment of the state's emergency preparedness, planning, and readiness.

An examination of the state's public health and medical infrastructure was a fundamental step in assessing Illinois' preparedness. In March 2000, the Department conducted a mail survey of the state's 219 hospitals (excluding psychiatric and rehabilitation hospitals) and its 94 local health departments.

The hospital questionnaires were sent under the signatures of John R. Lumpkin, M.D., state public health director, and Ken Robbins, President of the Illinois Hospital and HealthSystems Association. This cooperative effort between the public and private sectors emphasized the partnership required to address the vital issue of bioterrorism. IDPH staff offered assistance in completing the questionnaire. Responding were 98 percent of the hospitals surveyed and all of the state's 94 local health departments.

Hospital responses to the survey provided the Department with specific information about each hospital's ability to address a bioterrorism threat. Information also was collected about emergency contacts, decontamination capacity, disaster planning, staff and equipment availability, staff training needs, communications capabilities, disease surveillance and epidemiology experience, laboratory capabilities, and critical drug inventories.

#### Coming up in the March *Beacon*:

- An article by Leslee Stein-Spencer about the Illinois Mobile Emergency Response Team
- An article by Rad Jones on the development of the *Critical Incident Protocol Handbook*

Responses from the local health departments identified existing plans and procedures; system gaps and deficiencies; available human resources, including information and communication systems and supplies; capacity for implementing a multi-agency response; and training needs.

Survey results are under review by the Department's Multi-Disciplinary Task Force on Bioterrorism. Analysis will assist the Department in its efforts to help hospitals to develop bioterrorism response plans and procedures; to provide training to hospital staff, especially emergency department nurses and physicians, infection control personnel and pharmacists; to acquire and distribute federal funding; and to prepare statewide emergency response procedures.

Of particular importance is communications. Rapid and effective communication lines-constituting an "early warning" or early recognition system-between departments within individual hospitals, between hospitals, between hospitals and local health departments, and between hospitals and other local health care providers must be established and maintained. This ability to recognize common symptoms upon presentation at more than one health care provider is vital to an effective response to bioterrorism. A closely related development need is a statewide surveillance and reporting system that heightens awareness of these phenomena.

In its identification of the many assets that comprise the Illinois health care system, this initial assessment effort was encouraging. However, the survey also revealed many new and unaddressed needs posed by the threat of bioterrorism. It is these issues that define the challenges that lie ahead.

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You can download a copy of the Illinois Department of Public Health's (IDPH) survey on hospital/public health readiness from the NDPO's Common Communication Link. Go to the "Health and Medical" page and click on the link for the IDPH survey.

## THE NATIONAL INSTITUTE OF JUSTICE OFFICE OF SCIENCE AND TECHNOLOGY

By John Stedman, NIJ

The National Institute of Justice (NIJ), a component of the Office of Justice Programs, is the research agency of the U.S. Department of Justice. Created by the Omnibus Crime Control and Safe Streets Act of 1968, as amended, NIJ is authorized to support research, evaluation, and demonstration programs, development of technology, and both national and international information dissemination.

NIJ's Office of Science and Technology (OST) provides Federal, State, and local law enforcement and corrections agencies access to the best technologies available and helps them develop capabilities essential to improving efficiency and effectiveness.

As part of its efforts in the area of critical incident technology, NIJ has an on-going program focused on combating terrorism. While OST's counterterrorism program focuses on providing state and local law enforcement better tools to combat terrorism, it also addresses needs common to the entire first responder community. This program has initiated several technology efforts. Among them are:

**Threat Assessment** — In collaboration with the Technical Support Working Group (TSWG) and the Federal Bureau of Investigation (FBI), NIJ is funding a first of its kind study to define the chemical and biological agents that domestic first responders are most likely to encounter and that terrorists are most likely to use. This study, which was jointly funded with the Office for State and Local Domestic Preparedness Support (OSLDPS), is unique because it includes both a historical analysis of chemical and biological incidents, and a scientific assessment of the physical properties of chemical and biological agents to determine the true threat they pose. Anticipated date of completion is the first quarter FY01.

**Chemical/Biological Equipment Guidelines** — NIJ, through its Office of Law Enforcement Standards at the National Institute of Standards and Technology (NIST/OLES), and with TSWG, is surveying and documenting available chemical and biological

defense equipment. This effort, which was also jointly funded with OSLDPS, will result in publication of user guidelines for personal protection, detection, communication, medical, and decontamination equipment. Data will include cost, equipment parameters, current users, existing test data, and ordering information. The first guide has been published and is available online at [www.ojp.usdoj.gov/nij/pubs-sum/18449.htm](http://www.ojp.usdoj.gov/nij/pubs-sum/18449.htm).

**Personal Alarm Monitor** — NIJ, in collaboration with TSWG, is sponsoring development and demonstration of a wearable, low-cost device that provides warning of exposure to hazardous chemical and biological agents in sufficient time for the wearer to take protective measures. Approximately 200 prototypes providing a visual warning of exposure to hazardous chemicals should be available for demonstration and assessment in 2001. Some will be tested by the US Army Soldier and Chemical Biological Command (SBCCOM), and the bulk will be provided to law enforcement and other first responders for demonstration under operational conditions to determine, among other things, how easy they are to use and how susceptible they are to false alarms. Prototypes providing warning of anthrax exposure should follow within a year.

**Standards Development** — NIJ funded NIST/OLES, acting as executive agent for the Standards Coordinating Committee of the Interagency Board for Equipment Standardization and Interoperability (IAB), to work in collaboration with the Oklahoma City National Memorial for the Prevention of Terrorism (MIPT), the National Institute for Occupational Safety and Health (NIOSH), National Fire Protection Association (NFPA), Soldier Biological Chemical Command (SBCCOM), and the Occupational Safety and Health Administration (OSHA), to develop a national suite of standards and test methods for first responder equipment.

**PROTECT** — NIJ is collaborating with the Washington Metropolitan Area Transit Authority (WMATA) and Argonne/Sandia National Labs to demonstrate the utility of a chemical detection monitor in a subway environment. The intent of the project, for which initial funding was provided by NIJ, is to develop a capability for protection against a chemical weapons attack through the installation of a prototype real-time early warning chemical detection and alarm system. This system will increase the speed of evacuation with emergency alarms, video coverage, and announcements. In addition, early reaction time

will allow the equipment to shutdown in order to prevent further spreading of agent.

**First Responder Escape Mask** — NIJ and TSWG are collaborating to develop a short-duration protective mask that will protect first responders for enough time to exit the hazardous area, alert appropriate officials, and prevent others from entering the area. The mask must be lightweight, low-cost, and configured to be easily carried and donned quickly. It is intended for use in situations where there is little or no warning.

**The Center for Civil Force Protection** — NIJ provides funding to Sandia National Laboratories (SNL) for the Center for Civil Force Protection (CCFP). The Center provides physical security counterterrorism assistance to state and local law enforcement agencies, other organizations within State and local governments and private industry. While SNL itself initially provides the bulk of the assistance, the longer-term strategy is to form relationships with other organizations to make available their complementary counterterrorism expertise through the CCFP as a one-stop shop.

**Light-Weight Chem-Bio EOD Suit Testing** — NIJ, in collaboration with TSWG, is sponsoring independent testing of the Med-Eng SRS-5 bomb suit coupled with various chemical and biological (C/B) protective undergarments and SCBA breathing apparatus. The SR-5 is a lightweight, flexible bomb suit that provides balanced protection for personnel who perform improvised explosive device (IED) searches and render safe procedures. The purpose of this testing is to determine the optimum C/B protective ensemble for the SR-5 and to determine its effectiveness in providing C/B protection when subject to detonation of an IED.

**Flying Plate Disrupters** — NIJ, through the Joint (Justice - Defense) Program Steering Group (JPSG), is sponsoring the Naval Surface Warfare Center's Indian Head Division to develop and demonstrate a solution to the problem of dealing with large fuel-fertilizer bombs by using explosively formed slugs, or "flying plates." Derived from military technology that was developed for breaching and destroying armored vehicles, this system consists of a plastic cylinder capped by a 3 inch to 6 inch copper plate, and packed with a small explosive charge. When that charge is detonated, the plate is deformed into a slug and propelled into the explosive device, scattering the explosive material without detonation. Prototype design and development was completed in 1999. NIJ

funded a demonstration with the FBI-sponsored, Kansas Missouri Bomb Technician Working Group, which was completed in August 2000. Recommendations arising from that demonstration will be incorporated into a revised design in FY01.

**Improved Bomb Robots** — NIJ, through JPSG, and in collaboration with TWSG, sponsored a first of its kind study to define practitioner requirements for bomb robots and to identify any shortfalls in the current generation of bomb robots' ability to meet those requirements. The result of this effort will be used to produce an improved bomb robot for state and local bomb squads. The robot report is available online at [www.nlectc.org/jpsg/robotassessment/robotassessment.html](http://www.nlectc.org/jpsg/robotassessment/robotassessment.html). A solicitation for development of improved bomb robotics is being drafted. Release of a solicitation is anticipated in February 2001 with development commencing by June 2001.

**Bomb Technician Training Tool** — NIJ funded the Indian Head Division of the Naval Surface Warfare Center to develop an interactive, computer-based training tool for bomb technicians. This effort builds on work initially sponsored by the FBI, which is still collaborating in this project. This tool is packaged on a CD-ROM and will be configured for use on an IBM compatible PC with MS-DOS/Windows. This tool provides individual instruction and is intended to furnish refresher training on the course of study taught at the bomb technician's basic course at the Hazardous Devices School. Development is completed. Distribution is being made through FBI Bomb Data Center.

**Bomb Technician Data Retrieval Tool** — NIJ, through the JPSG, sponsored Eastern Kentucky University (EKU) to develop a PC-based data retrieval tool for bomb technicians and investigators. This effort will transfer to three CDs the 20,000 pages of print, drawings, photographs and charts contained in bomb technical, investigative and general information bulletins that have been published by the FBI for over 30 years. Coupled with an innovative search software package this technology will provide bomb technicians instantaneous access to a comprehensive library of bomb information while onsite at a bomb response call or a fast moving investigation. Development of the initial 3 CD set is complete and available through the FBI Bomb Data Center to military and civilian bomb squads across the United States and to 11 foreign countries.

**Explosive Diagnostics** — NIJ, through JPSG, and in collaboration with TSWG and the FBI is sponsoring a nationwide demonstration and evaluation, by law enforcement agencies of improved diagnostic systems for explosive devices. The first technology being evaluated is the RTR-3, developed under TSWG auspices. The RTR-3 is a computer based, portable x-ray system, that enables the diagnosis of explosive devices in real-time. It also enables the transmission of x-ray images of those devices, via modem, to remote experts for analysis. The Naval Explosive Ordnance Disposal Technology Division and the Naval Office of Special Technology are supporting this project. In FY00 the explosive diagnostic program began evaluation the RTR-4 and Delta X-ray foxRayII systems. This project will involve agencies from 27 states, the District of Columbia, and Puerto Rico.

For more information (status, contact person, etc.) on these, and other NIJ, technology projects, check the JUSTNET web page at: <http://www.nlectc.org>.

## **NAVY CBRE CASUALTY CARE MANAGEMENT COURSE**

**February 23 – 25, 2001**

**John D. Dingell VA Medical Center  
Detroit, Michigan**

The Navy Environmental Health Center and the Navy Environmental and Preventative Medicine Units have developed the Chemical, Biological, Radiological, and Environmental (CBRE) Casualty Care Course for medical personnel supporting emergency operations. This course was designed by experts in the field to provide medical personnel with the essential skills to manage casualties, whether in the hospital or field settings. The three-day course is designed for emergency responders, including physicians, nurses, physician assistants, EMTs, paramedics and independent duty hospital corpsmen who might provide treatment to CBRE casualties. The course covers CBRE casualty medical management and includes thought provoking interactive exercises.

Sponsored by the John D. Dingell VA Medical Center, HEMS and the MI-1 Disaster Assistance Team/National Disaster Medical System, instructors from the Navy Environmental Health Center have been invited to present the CBRE

Casualty Care Management course to hospital and field providers from local, state, federal, and military agencies.

This program will be presented from 8 a.m. to 5 p.m. daily and cost \$80 per person. For more information, call (248) 400-1300, or visit the web site at [www.michigandmat.org](http://www.michigandmat.org).

## NEW PALM PILOT PROGRAM ON CCL

A new Palm Pilot program based on the NDPO's *On-Scene Commander's Guide for Responding to Chemical and Biological Incidents* is now available for downloading on the Common Communication Link. The program, developed by members of the emergency response community, is designed to be a reference/checklist for PDAs.

## INTERAGENCY SATELLITE BROADCAST SCHEDULE

2/14 – FEMA – 1400-1600 ET “Unified Command EOC Operations” Part 3 of a 3 part series on Unified Command Issues at the state level. For more information visit their website at [http://www.dlnets.com/fema\\_3wmd01.htm](http://www.dlnets.com/fema_3wmd01.htm) For registration information call (877) 820-0305, or <http://www.dlnets.com/cdvregistration.htm>

3/7 – FEMA – 1400-1600 ET “FireQuest 2000” A HazMat Program Videotape rebroadcast of a question and answer session from the HazMat Responders Specialists Conference. Visit their website at [http://www.dlnets.com/htvn\\_8Mar01.htm](http://www.dlnets.com/htvn_8Mar01.htm) For registration information call (877) 820-0305, or <http://www.dlnets.com/cdvregistration.htm>

3/14 – FEMA – 1400-1600 ET “Lake Havasu Exercise” Comprehensive HazMat exercise designed to help local officials understand HazMat risks. Visit their website at [http://www.dlnets.com/htvn\\_14Mar01.htm](http://www.dlnets.com/htvn_14Mar01.htm) For registration information call (877) 820-0305, or <http://www.dlnets.com/cdvregistration.htm>

## A NATIONAL WORKSHOP ON DOMESTIC PREPAREDNESS AND COUNTERTERRORISM

The Emergency Services Training Institute is sponsoring A National Workshop on Domestic Preparedness and Counterterrorism on March 19-22, 2001 at the Ernest N. Morial Convention Center in New Orleans, Louisiana.

This workshop will bring together representatives from the federal agencies responsible for domestic preparedness and counterterrorism. The workshop is designed to promote the exchange of timely and essential information through presentations, panel discussions, workshops and small-group work. Federal representatives will address the availability of resources and the integration of authority and assets. The representatives will also be available to listen to you and your concerns for your community.

Presenters will represent a variety of federal agencies including CDC, DoD, DOJ, FBI, FEMA, EPA, NDPO, OSLDPS.

For more information, call 1-866-878-8900, or visit the website at [www.wmdnationalworkshop.com](http://www.wmdnationalworkshop.com) (the website link is active).

***The Beacon* is published monthly for members of the emergency response community. Please send articles, comments, feedback, and letters to the Information Sharing Team at the address listed below.**

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