

**GOAL 2.0 ENHANCE HEALTH AND SAFETY OF FDNY MEMBERS**

Enhance and expand programs to monitor and improve the health and safety of members.

Overview

The job of the emergency responder is inherently dangerous. As part of FDNY's commitment to its workers, all Bureaus and every member of the Department must be made keenly aware of the risks and actively seek to attain the highest levels of safety while performing his/her duties. The Department has developed and successfully implemented several key projects that focus on the identification, prevention and mitigation of injuries and illness that impact its work force. As part of the commitments made in the FDNY Strategic Plan for 2004-2005, several initiatives were undertaken to further safeguard the health and well-being of members, including the identification, tracking and monitoring of members on medical leave; the identification of types of injuries and illnesses; an evaluation of training and on-the-job performance of core competencies; and an expansion of the functions of the Bureau of Health Services (BHS).

Among its highlighted initiatives, the Department successfully developed an apparatus vehicle accident prevention and reduction program. The Department's Safety and Inspectional Services Command also developed the agency's first-ever Risk Management Plan that identifies and summarizes broad risks in areas such as administrative facilities, training, vehicle operations, personal protective clothing and equipment. Additional accident investigators were trained to expedite investigation and recommendations to prevent the injuries or fatalities from reoccurring based on similar circumstances. The Department procured new Firefighter bunker gear and EMS Personal Protective Equipment (PPE) for its members. The Bureaus of Operations and Training developed performance standards and an ongoing formal evaluation program to assess core competencies in the field. The Department also developed a database that electronically collects injury information from the CD72/73 documents. In addition, the BHS has received substantial grant funding to provide additional medical screenings and follow-up examinations, to monitor and treat eligible members and retirees who participated in rescue and recovery efforts at the World Trade Center.

Objective 2.1 Expand and enhance the physical and mental health monitoring of the work force in recognition of members' response to the World Trade Center on September 11th, 2001.

Background

The Department is committed to maintaining the safety and well-being of all personnel, but has made a special commitment to those members who responded to the World Trade Center on September 11th, 2001, and participated in the rescue and recovery thereafter. Virtually the entire FDNY work force participated in some role during this tragic period in the Department and City's history. The FDNY, through the BHS and its Counseling Service Unit (CSU), developed specific programs tailored to the medical and mental health needs of these members. As part of this ongoing commitment, the Department was successful in obtaining Federal grant funds to extend and enhance its World Trade Center Medical Monitoring Program, resulting in additional service capacity to continue to monitor and improve the physical and mental health of its members through 2009.



Accomplishments

FDNY's World Trade Center Medical Monitoring Program, with support from federal partners, initiated medical screening of FDNY members in October 2001. BHS has provided medical screening to approximately 13,700 individuals since that time. The results revealed a significant increase in pulmonary disease. Since September 11th, more than 600 members have retired earlier than anticipated due to pulmonary disease, representing a nearly four-fold increase in retirements due to lung disabilities among FDNY members. Additionally, more than 12,000 members have sought mental health services through the Department's expanded CSU. Approximately 20 members per year (approximately 150-180 members overall since 2001) have retired and suffer from post-traumatic stress and other mental health disorders. CSU currently serves 260 new clients each month at its six locations. In contrast, prior to September 11th, CSU served an average of 50 clients each month.

BHS also has updated its record-keeping systems. Specifically, a computer system has been developed to track members who are deployed on special operations assignments and facilitate the validation of immunization histories and medical information. These automated systems have been used effectively during the Department's urgent deployment to Louisiana and Mississippi in the aftermath of Hurricanes Katrina and Rita.

Next Steps and Time Frame

- Due to increasing demands for its services, BHS has expanded and renovated its facilities to improve the efficient movement of patients during the necessary testing and examination process. These renovations will be completed by January 2007.
- To further address the outstanding mental health needs of members, BHS is developing a follow-up self-administered questionnaire that was made available to members on-line in September 2006. The results of this questionnaire will assist BHS to more effectively identify and refer individuals to appropriate specialists and specialized services.
- Utilizing \$25 million in Federal grants, BHS will continue health monitoring of active and retired members through July 2009. Specifically, the goal of this expanded program is to conduct three medical examinations per member over five years. The Department will complete 13,700 secondary screening examinations by July 2007.
- Utilizing additional grant funds, BHS will develop treatment plans for members with WTC-related illnesses and also provide additional financing for specialized services, such as new medications, tests and medical procedures.
- Mental health monitoring will be expanded to active members during their required annual medical examination scheduled every 18 months. This additional service was initiated in September 2006.
- By July 2007, the Department will complete the computerization of several injury and illness reporting forms, which will provide critical information regarding work-related injuries. BHS then will work with the Bureaus of Safety Command, Operations and Training to address injury or illness patterns that may emerge.



Lead Bureaus

- Health Services
- Counseling Services Unit

Objective 2.2 Enhance operational safety management and behavior.

Background

More than eight FDNY members per year died in the line of duty from 1960 through 1980. In the past 25 years, two FDNY members per year, on average, have died in the line of duty. The Division of Safety was re-established in 1981 due to the deaths of two Firefighters, which occurred when a roof rope failed during a rescue operation. Since that time, Safety Command has conducted more than 55 investigations into serious injuries and deaths of members. These investigations have resulted in the identification of common causes of past serious injuries and deaths, whereby hundreds of written recommendations and operational procedures and guidelines have been enacted to increase the safety of on-duty members.

Accomplishments

Based on the FDNY Strategic Plan for 2004-2005, the Department's Safety and Inspectional Services Command successfully researched and compiled an FDNY Risk Management Plan. In addition, the Safety and Inspectional Services Command has distributed numerous documents related to various aspects of safety, including Safety Command Reviews, authored articles for the FDNY training publication *WNYF* on the most salient on-the-job safety issues and successfully implemented a vehicle accident-reduction program for all field units City-wide.

Next Steps and Time Frame

Building on these initiatives, Safety and Inspectional Services Command's ongoing efforts in the area of safety practice include the development of a longer range strategy of developing a vigilant safety management program Department-wide. The aim is to identify and transform the fundamental beliefs and day-to-day behaviors of both managers and staff so that together, they can further embrace the principles of vigilant safety practice at all times. These initiatives include:

- Develop management strategies that will significantly enhance effective safety management and behavioral safety through heightened hazard-risk awareness, a renewed emphasis on injury prevention and an intense promotion of safety performance of all members in carrying out their duties.
- Develop new short- and long-term safety programs aimed at improving the organization's safety management and hazard-risk-reduction functions by transforming both manager and worker beliefs and behaviors.
- Engage safety professional consultants in other fields, such as private manufacturing, utility, industrial, chemical, petroleum, construction and mining fields, to consult on evaluating and modifying safety practices and behaviors of FDNY members.



- Implement weekly Staff Chief Safety Forums to be presented by Staff Chiefs to Deputy and Battalion Chiefs on select safety practice topics based on the FDNY Annual Risk Management Plan. These forums initially will include discussions on stairway management and emergency *mayday* handie-talkie transmissions.

Lead Bureaus

- Safety and Inspectional Services Command
- Training
- Fire Operations
- EMS Command

Objective 2.3 Develop operational procedures for applying water to live electricity at Consolidated Edison facilities to minimize the amount of collateral damage and disruption of electrical service to larger geographical areas.

Background

The FDNY was approached by the Consolidated Edison Company of New York (Con Ed) to consider using water to contain fires that may occur at Con Ed facilities and substations involving energized electrical equipment. Decades of global firefighting experience indicate that there are significant risks associated with using water on energized electrical equipment. The scope of the project is to validate that water streams can be applied safely and establish a safe protocol for the application of water streams on exposed energized or unprotected substation equipment during firefighting operations. The purpose of applying water streams to live electrical components is not to extinguish the fire, but rather to minimize the amount of damage incurred to components in the immediate and adjacent areas. This damage can lead to electric service disruption to a larger geographical area due to collateral damage from the originally affected equipment. The subsequent time and repairs necessary to return the Con Ed facility to an operational mode is minimized and Con Ed would experience a potential minimum disruption to their customers' electrical service.

Accomplishments

The Safety and Inspectional Services Command, in conjunction with Con Ed, has conducted extensive joint testing on the use of water on live electrical equipment. The tests consisted of applying a variety of water streams and different type nozzles to live energized electrical equipment. Testing conditions were designed as worst-case situations, whereby all stray current was read by measuring devices attached to the nozzle. The test data were evaluated and stand-off distances established. As a result of these tests, the Safety Command concluded that water can be applied safely at proper stand-off distances. The application of water streams to live electrical components usually will not be undertaken as an initial strategy by responding units. This decision typically will be made by Chief Officers of the rank of Deputy Chief and higher after consultation with and approval by the Con Ed "White Hat" managerial representative at the scene, who is knowledgeable about the maximum voltage potential at a specific site. Common terminology was defined with recommendations to modify Fire Department and Con Ed procedures accordingly. The FDNY and Con Ed have proposed a joint operational plan to modify standard operating guidelines and procedures involving fires and live electrical equipment.

*Next Steps and Time Frame*

- Pilot-test and develop new standard operating firefighting guidelines, procedures and safety protocols for the application of water streams on exposed energized or unprotected Con Ed facilities or substation equipment during firefighting operations.
- Develop a draft procedure and present pilot findings to senior Staff Chiefs for discussion, review and approval.
- Partner with Con Ed to jointly develop a training video that will be used as a training and teaching tool for FDNY firefighting operations involving energized electrical equipment.
- Safety Command and Con Ed will jointly present training sessions to senior Staff Chiefs and Deputy Chiefs to introduce this new concept and address concerns.
- Con Ed will continue to review and update the Department's Critical Information Dispatch System (CIDS) cards for their facilities to include the maximum potential voltage that possibly could be encountered at a particular site. Con Ed also is creating CIDS cards for other facilities, such as unit substations, that FDNY currently does not have included in the CIDS program.

Lead Bureaus

- Safety and Inspectional Services Command
- Fire Operations
- Training