

Meeting the Increasing Demands for 911 Pre-Hospital Care Services

by Abdo Nahmod, Chief, Bureau of EMS

In the past 10 years, the landscape of the first responders' environment has changed dramatically within New York City. After 9/11, the FDNY leadership recognized that broad organizational change was necessary for the Department to adapt its response operations to unpredictable *all-hazards* threats. The Bureau of EMS has significantly progressed in its operational readiness to provide Basic and Advanced Life Support (BLS and ALS) to the public.

The Bureau of EMS is responsible for ensuring the timely delivery of quality pre-hospital care through the New York City 911 system. Key areas of focus include the coordination of medical resources at the scene of assignments, management of EMS operations at mass-casualty incidents and timely delivery of patients from the scene of assignments to appropriate receiving facilities. The specialized training and equipment employed by EMS members brings the FDNY to the forefront in cutting-edge pre-hospital emergency medical care.

Post-9/11 preparedness

Currently, the FDNY has 35 EMS 911 units trained and equipped to operate at the Haz-Mat Technician level, with the specific mission to provide medical management to patients contaminated with hazardous materials or affected by a weapon of mass destruction (WMD). Haz-Tac members receive an 80-hour Hazardous Materials Technician course, where they are trained to operate in all levels of respiratory protection and Chemical Protective Clothing (CPC). The Haz-Tac members can operate in all zones of a hazardous materials or WMD incident and they are trained and equipped to provide emergency patient decontamination if needed.

Ten of the 35 Haz-Tac units are trained as Rescue Medic units. Members assigned to these units have additional training as Rescue Technicians, with a concentration on the medical management of patients in the technical rescue environment. This includes the use of specialty medical equipment and medications through advanced patient care protocols.

The primary mission of the Haz-Tac units is that of a 911 EMS resource. Under normal circumstances, they remain available through the 911 system. However, when operating at assignments involving hazardous materials and technical rescue, Haz-Tac-trained units fall under the direction of the Haz-Mat and

Rescue Group.

Actions to improve safety for emergency medical care providers include issuance of personal protective equipment (PPE) that meets NFPA Standards 1951 and 1999. The mandatory use of PPE is emphasized for the highest levels of protection. Continued training and use of Incident Command System (ICS) scene safety also is stressed through the correct placement of vehicles to protect members.

The Medical Monitoring Initiative is part of the Rehabilitation and Care Procedures (AUC 230/EMS OGP 106-14), using a non-invasive measurement of oxyhemoglobin (SpO2) and carboxyhemoglobin (SpCO) levels measured with a RAD-57 Pulse CO-Oximeter.



Non-invasive measurements of oxyhemoglobin and carboxyhemoglobin come under the Medical Monitoring Initiative, part of Rehabilitation and Care Procedures.

New initiatives for EMS Bureau

The 2011 *EMS Strategic Plan* highlights Call Queuing, in which EMS (BLS) resources are not dispatched to selected low-priority assignments, but remain available for life-threatening priority assignments. Based on unit availability, EMS dispatchers will queue or hold off dispatching a unit if it's the only one available in a particular service area. Dispatchers will advise callers that there will be a delay in assigning a unit. Dispatchers will maintain periodic contact with the callers, updating them on unit availability and instructing them to call back if there's a change in the patient's medical condition. The objectives are to provide an appropriate and timely response to segment 1-3 call types in an attempt to improve patient outcomes. The Call Queuing pilot project is expected to begin in late 2011.

The Bureau of EMS currently is evaluating paperless patient care record technology in Staten Island. EMS crews are using a handheld device to document pre-hospital care assessment and treatment of patients, then transmitting the data to the receiving hospital via a wireless connection. This new technology will enable the FDNY to transmit, receive and use patient data in a real-time fashion. Some anticipated benefits of this system include better quality assurance, compliance and information for EMS crews in the field.



About the Author...

Abdo Nahmod is a 25-year veteran of emergency medical service and the FDNY. He is the Chief of the Bureau of EMS. His prior assignment was Chief of Emergency Medical Dispatch. He studied health science at the College of Staten Island and holds a Master's degree in Homeland Security Studies from the Naval Postgraduate School Center for Homeland Defense and Security. This is his first article for WNYF.



(Above) Haz-Tac-trained units come under the direction of the Haz-Mat and Rescue Group when operating at hazardous materials and technical rescue incidents. (Right) Ten of the Haz-Tac units are trained as Rescue Medics.

