



# Healthcare Horizon

The Newsletter of the Minneapolis Medical Research Foundation at Hennepin County Medical Center

## Prepared for Any Emergency

How do you become one of the best Emergency Departments in the nation?

### It Takes a Team

The Minneapolis Medical Research Foundation and its partners, Hennepin Faculty Associates and Hennepin County Medical Center, are proud to serve our engaged, caring community. Hennepin County Medical Center has achieved a national reputation for excellence with 21 full-time Hennepin Faculty Associates physicians specializing in emergency medicine, one of the most sought after medical residency programs in the country, point of care research translating into better patient care, and a critically ill patient survival rate of greater than 99 percent.

#### Department of Emergency Medicine Mission Statement:

The goals of the Emergency Department are to deliver high quality critical, emergent and urgent care while maintaining a safe, respectful and non-discriminatory environment. We accomplish this mission by providing 24-hour per day professional services utilizing Board Certified Emergency Medicine Physicians, Emergency Medicine Residents, and Registered Nurses certified in Advanced Cardiac Life Support (ACLS) and Traumatic Nursing Core Course (TNCC). The Emergency Department staff works together to:

- ◇ provide optimal patient care
- ◇ share health and safety skills and knowledge with the community
- ◇ train students in various health care professions
- ◇ advance emergency care through medical and nursing research



*Hennepin staff prepare to receive the injured from the 35W bridge disaster.*



*Doug Brunette, MD and John Hick, MD, Emergency Department physicians*

### Hennepin's Emergency Department is the Busiest in Minnesota

Approximately 100,000 patients visit the Emergency Department at Hennepin County Medical Center annually. Board certified Emergency Medicine physicians from Hennepin Faculty Associates provide 24-hour coverage and out-state emergency consultation. Nurses receive and participate in teaching specialized training in handling trauma and medical emergencies, including Advanced Cardiac Life Support, Traumatic Nursing Core Course, and Advanced Pediatric Life Support.



*The ER springs into action with the arrival of the injured from 35W.*

In 1989, the Emergency Department was rated a Level 1 Trauma Center by the American College of Surgeons, the first in the state to receive that designation.

#### 2005 HCMC Emergency Services Statistics:

Total Patient Visits	<b>98,838</b>
Ambulance Runs	<b>52,257</b>
Helicopter Patients	<b>239</b>

# Emergency Medical Services (EMS)

## Ambulance Service: On Call 24/7

Hennepin County Medical Center and Hennepin Faculty Associates physicians have provided emergency medical services (EMS) to Minneapolis and the surrounding area for over 100 years. The Primary Service Area for Hennepin EMS covers 14 communities, approximately 266 square miles, and serves the residents in Hennepin County. The ambulance service responds to approximately 55,000 calls per year.



*A Hennepin ambulance arrives at the scene of the 35W bridge collapse.*

Emergency care begins even before the ambulance arrives when a call is transferred from 911 to the state-of-the-art EMS Communications Center housed at Hennepin

County Medical Center. All dispatchers are emergency medical dispatcher (EMD) certified, the highest level of certification. When needed, they stay on the line with the caller to provide pre-arrival assistance and support.

All ambulances are staffed by two paramedics, who have passed the National Registry examination, the highest certification possible for paramedics. In 2007, EMS projects that they will make 56,115 ambulance runs.

“Hennepin County Medical Center is proud of its EMS system. EMS continues to grow and assumes a prominent role as the medical arm of emergency response,” said Martin Van Buren, EMS Director. “Hennepin County Medical Center - Emergency Medical Services is a highly trained and efficient team acting in cooperation with Hennepin County and the Metro Region - setting the standard for emergency care.”

Van Buren continues, “EMS also received national recognition for our response at the I35W bridge collapse on August 1, 2007 emphasizing the extraordinary response, the level of coordination, and the quality of care. The I35W response was a magnificent demonstration of cooperation among EMS providers, in cooperation with public safety, with Hennepin County Medical Center EMS emerging as an industry leader.”

## Supporting Emergency Medical Services

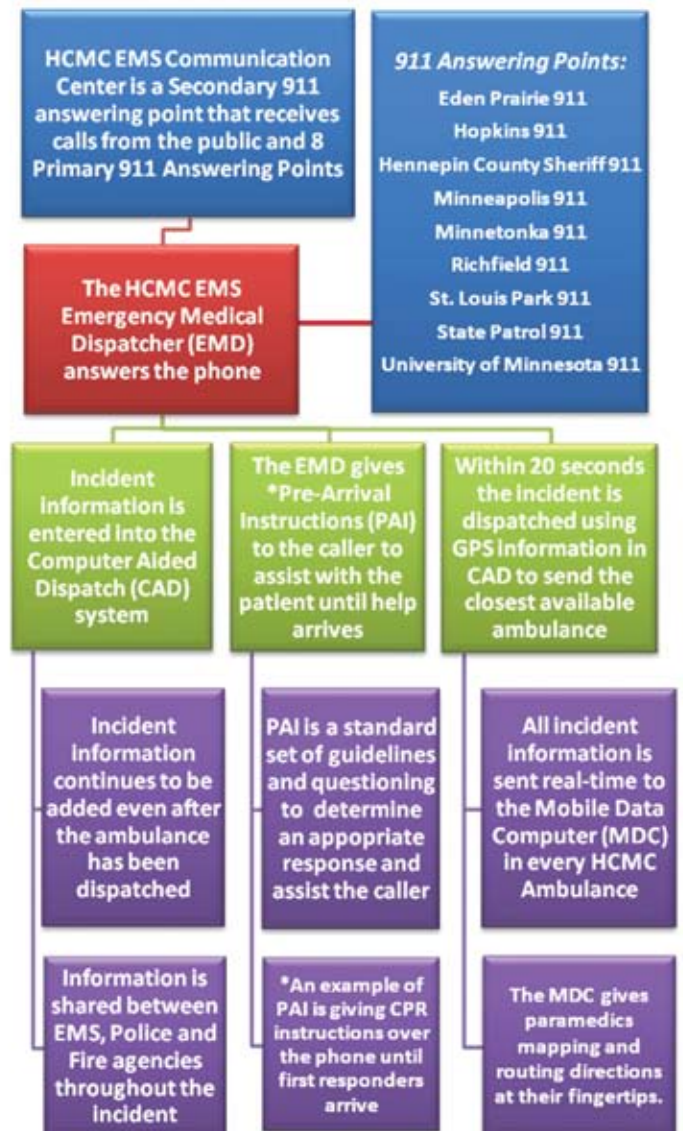
Maintaining our readiness to respond is a major responsibility. This requires constant training and education of medical staff, coordination with allied health professionals, ongoing EMS research, up-to-date communication systems, and financial investment. Contributions support all of these needs, ensuring the readiness of Hennepin Emergency Medical Services.



*Joseph E. Clinton, MD, Chief of Emergency Medicine*

## EMS Incident Dispatch Flowchart

In an emergency, a lot happens from the time you make a 911 call to the arrival of Emergency First Responders. This charts shows all the steps that happen to get an ambulance to an emergency call.



# MMRF Research & EMS Education

## Minneapolis Medical Research Foundation

MMRF and the Emergency Department have conducted hundreds of research projects, ranging from the best ways to manage pain, to what happens over time to patients with chronic illness, to socioeconomic issues that force people to choose between buying food or their medication(s).

"The exciting thing about our research is that it is point of care. In other words, we study the best way to treat our patients while we are caring for them," said Michelle Biros, MD, in the Emergency Department.

The following examples of research conducted in the Hennepin's Emergency Department have produced many changes leading to improved patient care. These changes have been adopted by emergency departments throughout the country.

- ◇ Our Emergency Department developed innovative ways of airway management that improved outcomes for patients with traumatic injury, asthma, traumatic head injury, or overdoses.
- ◇ Because of research in procedural sedation, our Emergency Department is one of a few in the country that is allowed to sedate patients for painful procedures, such as relocation of dislocated bones, without an anesthesiologist present.
- ◇ A large amount of emergency medicine research concentrates on the management of pain. Doctors continue to look at various medications for managing pain.
- ◇ Our Emergency Department is also studying how pressure points on the hand impact the relief of pain such as a headache.

"We have shown that our clinicians are trained so well and are so competent that they can give procedural sedation," said Dr. Biros. "It means that our patients spend less time in pain and it also reduces the overall time and cost of their care."

From pre-hospital to Emergency Department, the depth and breadth of medical research means that Hennepin patients are getting the most cutting-edge treatment found anywhere. When it comes to a critical illness or injury, patients who know say, "**Take me to Hennepin County Medical Center!**"



*EMS teams coordinating efforts.*

## EMS Education Department Trains Thousands of Providers Each Year

The mission of Hennepin's EMS Education Department is to enhance the quality of emergency medical care provided to the community through training, education, and research.

The department staff is comprised of nine paramedics and two registered nurses. The staff leads emergency medical courses to provide continuing education to firefighters, police officers, paramedics, nurses, and physicians. In addition, the staff serve as informational resources on EMS topics for public safety agencies throughout Hennepin County and the region. In 2006, over 2,800 students attended EMS Education sessions. This represented over 38,000 participant hours of EMS training.

EMS Education partners with the University of Minnesota to offer college credit for the EMT Basic course and First Responder for Athletic Trainers and Coaches. HMC partners with Ridgewater College of Willmar, MN to offer a paramedic program to students in the West Metro and Central Minnesota regions.

Cindy Anderson, BS, NREMT-P, EMS Education Specialist, said, "Our bottom line is to help our students to provide the best patient care possible."

The *Healthcare Horizon* is a publication of the Minneapolis Medical Research Foundation (MMRF). The mission of MMRF is to improve patient care and the health of our community through research and education.

This newsletter brings you a small sample of how MMRF is improving the health and well-being of Minnesotans through medical research and education.

Please direct any comments or questions to the communications department at MMRF, 612.347.7672.

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# Special Edition Healthcare Horizon

The Newsletter of the Minneapolis Medical Research Foundation  
at Hennepin County Medical Center



*Emergency first responders rescue victims on the 35W bridge.*

## Responding to the Minneapolis Bridge Collapse

Compassionate individual responses combined with the superb, immediate response from our police, fire, and medical personnel is a testament to the strength of our wonderful community.

Thank you.

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