

About the Emergency Medical Services (EMS) Profession

Nature of the Work

People's lives often depend on the quick reaction and comprehensive care of emergency medical technicians (EMTs) and paramedics. Incidents as varied as automobile accidents, heart attacks, drowning, childbirth, and gunshot wounds all require immediate medical attention. EMTs and paramedics provide this vital intervention as they care for and transport the sick or injured to an appropriate medical facility.

Depending on the nature of the emergency, EMS personnel typically are dispatched to the scene by a 9-1-1 dispatcher and often work closely with police and fire department personnel. Once on scene, they quickly determine the nature and extent of the patient's condition while trying to ascertain whether the patient has preexisting medical problems. Guided by policies and protocols, they give appropriate emergency care and when necessary, transport the patient. EMTs and paramedics also treat patients with minor injuries on the scene of an accident or at their home without transporting them to a medical facility. Some paramedics work as part of helicopter flight crews that transport the critically ill or injured. All treatments are carried out under the supervision of a physician.



EMTs and paramedics may use special equipment such as backboards to immobilize patients before placing them on stretchers and securing them in the ambulance for transport to a medical facility. Usually, one EMT or paramedic drives while the other monitors the patient's condition and gives additional care as needed. At the medical facility, EMTs and paramedics transfer patients to the emergency department staff, report their observations and actions, and may provide additional emergency treatment. After each run, EMTs and paramedics replace used supplies, check equipment, decontaminate the equipment and the interior of the ambulance, and write a patient care report.

Beyond these general duties, the specific responsibilities of EMTs and paramedics depend on their level of training and/or licensing. To determine this, the Michigan Department of Community Health Bureau of Health Policy, Planning & Access - EMS & Trauma Systems Section licenses EMS providers after successful completion of the National Registry of Emergency Medical Technicians (NREMT) practical and written test. The State of Michigan licenses at four levels: Emergency Medical Responders (EMR), EMT, Advanced EMT (AEMT), and Paramedic. The EMR is trained to provide basic

emergency medical care as they tend to be the first to arrive at the scene of an incident. Many firefighters, police officers, and other emergency workers have this level of training. The EMT is trained to care for ill or injured patients on scenes and during transport by ambulance to the hospital. They have the skills to assess a patient's condition and manage respiratory, cardiac, other medical and trauma emergencies. The AEMT has more advanced training that allows administration of intravenous fluids, use of advanced airway techniques and equipment to assist patients experiencing emergencies. Paramedics provide the most extensive pre-hospital care. In addition to the procedures already described, paramedics may administer drugs, interpret electrocardiograms (ECGs), use manual defibrillators, perform surgical airways, and use other complex equipment.

Working Conditions

EMTs and paramedics work in all types of places in all types of weather. They are required to do considerable kneeling, bending, and heavy lifting. They risk noise-induced hearing loss from sirens and noisy accident scenes and back injuries from lifting patients. In addition, EMTs and paramedics may be exposed to diseases such as Hepatitis and HIV, as well as violence from drug overdose victims or mentally unstable patients. The work may not only be physically strenuous, but also stressful, involving life-or-death

situations. Nonetheless, many people find the work exciting and challenging and enjoy the opportunity to help others. EMTs and paramedics should be emotionally stable, have good dexterity, agility, and physical coordination, and be able to lift and carry heavy loads.

EMTs and paramedics employed by private ambulance services work between 45 and 50 hours a week; by fire departments work about 50 hours a week and by hospitals frequently work between 45 and 60 hours a week. Some of these workers, especially those in police and fire departments, are on duty for extended periods. Many EMTs and paramedics work 24/48 hours shifts in which they work for 24 hours and are off the next 48 hours. Because emergency services function 24 hours a day, EMTs and paramedics have irregular working hours that can add to job stress.

Employment

EMT and paramedic jobs are expected to increase through 2018. Most career EMTs and paramedics work in metropolitan areas. There are many more volunteer EMTs and paramedics, especially in smaller cities, towns, and rural areas.

Training, Qualifications and Advancement

Formal training and certification is needed to become an EMT or paramedic. In Michigan, an applicant must complete a Department of Community Health approved course, then pass both a credentialing exam and skills exam. All initial applicants will be required to take the National Registry of EMTs examination to obtain Michigan licensure. To maintain National Registry certification, EMTs and paramedics must reregister every 2 years for the National Registry along with fulfilling mandatory continuing education credits.



Training is offered at progressive levels: EMT, AEMT, and paramedic. The EMT represents the first level of skills required to work in the emergency medical system. Formal classroom experiences are enhanced with combined time in an emergency room and on an ambulance. Coursework typically emphasizes emergency skills such as managing respiratory, trauma, and cardiac emergencies. The program also provides instruction and practice in dealing with bleeding, fractures, airway obstruction, cardiac arrest, and emergency childbirth. Students learn to use and maintain common emergency equipment such as backboards, suction devices, splints, oxygen delivery systems, and stretchers. The course is a prerequisite for further training as an AEMT or paramedic.

AEMT training requirements vary from state to state. In Michigan, AEMTs receive additional training in assessment, trauma, physiology, airway management, and medical emergencies. Training commonly includes 180 plus hours of additional instruction beyond EMT coursework. Prerequisites for taking the AEMT examination include certification or registration as an EMT, required classroom work, and a specified amount of clinical experience. Being an AEMT is not a prerequisite for paramedic training.



The most advanced level of training for this occupation is paramedic. At this level, the caregiver receives additional training in pathophysiology, pharmacology, patient assessment, cardiology, trauma, airway management and extensive training in other body systems. The paramedic program lasts (on average) 18 months and can result in a certificate and/or associate degree in applied science. Such education prepares the graduate to take the NREMT and the State Credentialing Examination and become licensed as a paramedic. Extensive classroom, clinical and field training is required during the course.

Job Outlook

Population growth and urbanization will increase the demand for full-time paid EMTs and paramedics rather than for volunteers. In addition, a large segment of the population, the aging baby boomers, will further spur demand for EMT services, as they become more likely to have medical emergencies. There will still be demand for part-time, volunteer EMTs and paramedics in rural areas and smaller metropolitan areas.

Most opportunities for EMTs and paramedics are expected to arise in hospitals and private ambulance services. Competition will be greater for jobs in local government, including both fire and police departments. Opportunities will be best for those who have advanced licensure, such as AEMT and paramedic, as clients and patients demand higher levels of care before arriving at the hospital.

EMS can be a rewarding career especially for those who truly consider themselves true caregivers. EMS professionals are those who are capable and willing to deal with the stress, difficult working conditions and modest pay all in an effort to answer the call of those in need!