Emergency Medical Technicians

Emergency medical technicians (e’mer-gen-cy ’med-i-cal tech’ni-cians) respond to medical emergencies, perform emergency medical treatment, and transport patients to hospitals in ambulances, helicopters, or other emergency vehicles.

Work Performed

Emergency medical technicians, also known as EMTs, work in two-person teams. Driving a specially equipped vehicle, they respond to calls from a dispatcher, who tells them where the emergency is and what it is. The dispatcher uses both radio and telephone equipment to coordinate the efforts of all. When they arrive at the scene, EMTs may request help from police, fire, or utility company personnel.

EMTs first determine the kind and extent of the injuries or illness of the patients. They look for medical tags that list an illness or disease like diabetes or epilepsy. They then give emergency care following strict guidelines for the procedures they may perform. They base their decision on their examination of the patients, their knowledge of prehospital emergency medical standards, and on the statements of the patients or the people at the scene.

There are three classifications of emergency medical technicians: EMT - basic, EMT - intermediate, and EMT - paramedic.

EMTs - basic perform basic life support and specific tasks in emergencies. They may treat shock and poison victims, dress and bandage wounds, control bleeding, resuscitate persons in cardiac arrest, assist patients in breathing, maintain a patient’s airway, immobilize fractures, and assist at childbirth. They may use an Automated External Defibrillator (AED) to shock a stopped heart into action.

EMTs - intermediate do the same tasks as EMTs - basic. They also have the skills and training to assess trauma patients, administer intravenous therapy, use...
anti-shock garments, and to maintain the airway using advanced airway techniques.

**EMTs - paramedic** have the most advanced training. They are qualified to administer drugs (both orally and intravenously) and to use the complex equipment in an advanced life-support ambulance.

Some conditions are simple enough to treat by following general rules and principles. Other serious problems may require step-by-step directions from hospital medical personnel with whom the EMTs are in radio contact.

EMTs deliver life support procedures either at the scene or in the ambulance on the way to a hospital. They may apply splints, give oxygen, assist with and administer medications, or treat minor wounds or cuts. They may open an airway, assist the patient in breathing, control bleeding, apply bandages, assist in childbirth, or give care to poison or burn patients. Throughout the procedure, EMTs keep in touch with the hospital or dispatcher by telephone or radio.

EMTs sometimes give medical aid to persons trapped in a car, cave-in, collapsed building, or other tight and precarious situations. EMTs may free them, or they may give care and protection until rescuers can release the trapped persons. They also help operate equipment such as the Jaws of Life, which cut away metal to release the driver or other persons trapped in a car.

When patients need treatment or examination at a hospital, EMTs may use special equipment such as a backboard to immobilize them before lifting them onto a stretcher and into the ambulance. They fasten both patient and stretcher securely before driving to a hospital. Typically, EMTs take turns driving and caring for a patient. While one EMT drives, the other monitors the patient’s vital signs and gives additional care. They alert the hospital to the kind and extent of the injuries or illness and the number of persons in need of care. Physicians at the hospital may give them instructions on treatment of the patients en route to the hospital.

On arrival at the hospital, they transport the patients to the emergency department. EMTs report the treatment they gave and their observations. They may help with further emergency treatment.

EMTs may also transport non-emergency patients from hospitals to nursing homes or other healthcare centers. These trips, although they do not require as much attention as an emergency, nevertheless require medical supervision.

After each trip EMTs replace used linens, blankets, and other supplies. They make sure all equipment is in working order for the next call. If a patient has a contagious disease, EMTs decontaminate the inside of the ambulance.

**Working Conditions**

Emergency medical technicians work both indoors and outdoors in all kinds of weather. The site of an emergency may be a private home, a factory, a highway, or a riverbank. Some EMTs use helicopters to transport ill or injured patients.

The job is strenuous. In the course of their work EMTs kneel, bend, and lift. The work is also hazardous. EMTs may be exposed to diseases like AIDS or hepatitis-B. While transporting patients, they may deal with violent patients. On the job they must make literal life-or-death decisions. They may have to cope with the death of patients. At the scene of an explosion or fire, EMTs may be exposed to toxic fumes, fires, and the like. They may suffer hearing loss from ambulance sirens and back injury from lifting patients.

**Hours and Earnings**

Emergency medical technicians employed by fire departments often have about a fifty-hour workweek. Those employed by hospitals frequently work between forty-five and sixty hours a week, and those in private ambulance services, between forty-five and fifty hours. Some EMT’s, especially those in police and fire departments, are on call for extended periods. Because emergency services function twenty-four hours a day, EMT’s have irregular working hours that add to job stress. They may even work split shifts.

The earnings of EMTs depend on their training, their experience, and the employer. The geographic locality also affects their earnings. Many EMTs in small towns and rural areas are unpaid volunteer workers. According to the Bureau of Labor Statistics, in 2006, the average annual salary of EMTs was about $29,390 a year. Earnings ranged between a high of more than $45,280 a year to a low of less than $17,300 a year.

Benefits offered may include paid vacations and holidays; 401 K retirement plans; vision, dental and health insurance; and sick leave. EMTs employed by fire departments or hospitals frequently receive the same benefits as those of other employees.

**Education and Training**

To enter an EMT educational program, students typically must be eighteen years old. However, some states allow students as young as sixteen to enroll in an EMT-Basic program and provide medical treatment under direct supervision of an EMT. They must have a high school diploma or its equivalent and a driver’s license. Since EMTs may drive the ambulance, they must have a good driving record.

Depending on state requirements, as little as 110 to 120 hours of formal training offered by police, fire, and health departments, hospitals, or colleges and universities are needed to qualify for jobs as an EMT - basic in a program approved by the U.S. Department of Transportation. Physicians, nurses, EMTs - intermediate, and EMTs - paramedic give the lectures and demonstrations. Fieldwork covers simulated emergencies in which students carry out procedures they learn in class.

Students learn to deal with blocked airways, respiratory and cardiac arrest, bleeding and shock, and fractures. They learn what to do for soft-tissue injuries and chest and abdominal injuries. They get instruction in medical
emergencies, environmental injuries, emergency childbirth, rescue of trapped persons, vehicle operation and maintenance, communications, and report writing. Students also learn to use and care for equipment such as backboards, suction machines, splints, oxygen delivery systems, and stretchers.

In some states after completing the basic 110-hour course, EMTs can take the intermediate course that teaches them some advanced life-support skills. They learn to assist patients, manage shock, use intravenous equipment, give fluids, and apply anti-shock garments.

EMTs can then take the EMT - paramedic course, which consists of an additional 1,000 to 2,000 hours of classroom instruction and clinical training. Students receive instruction, in-hospital clinical practice, supervised fieldwork in the operation of equipment, and the care of patients in an advanced life-support rescue vehicle. They also receive instruction in the administration of medicine or drugs both orally and intravenously.

EMTs from the Armed Force and those with experience approved by a state agency may enroll in an EMT - paramedic program after proving that their knowledge and skill qualify them.

All students begin as observers. They then go on to keep records. Later they perform patient care. Finally they become patient care leaders. Students are always under the observation of a physician, emergency medicine nurse, or an EMT - intermediate or paramedic. All fieldwork is coordinated with class studies. Students learn the ethical and legal obligations that go with the job.

Besides the EMT - basic, EMT - intermediate, and EMT - paramedic programs, there are other advanced programs in ambulance driving, emergency medical dispatching, and in removing trapped victims. The National Highway Traffic Safety Administration of the U.S. Department of Transportation has developed these and other programs. University and college programs leading to the associates degree, the baccalaureate degree, and master’s degree are available to prepare EMT personnel for related positions.

Licensing, Certification, Unions and Professional Societies

All fifty states have some kind of certification procedure. In forty-three states and the District of Columbia, registration with the National Registry of Emergency Medical Technicians (NREMT) is required for some or for all certification ratings. Other states require their own certification examination or offer the option of taking the National Registry examination.

On completing approved programs, EMTs must meet experience requirements and pass written and practical examinations of the state in which they work, or they must pass the exam of the NREMT. In the practical test EMTs perform in mock emergencies. Students who pass the registry exam earn the title Registered EMT - basic, intermediate, and paramedic.

The examination for the intermediate rating tests EMTs as they assess trauma patients, give intravenous therapy, and use the advanced airway equipment and the anti-shock garment. They then are recommended as EMTs intermediate. With intermediate certification, most EMTs often then complete the EMT - paramedic training. Some states require field experience as paramedics. They must pass a written and a practical examination.

To maintain their certification, all EMTs must reregister, usually every two years. To reregister, they must be working as an EMT and meet a continuing education requirement, or complete the state requirement for continued recognition. EMTs employed in fire and police departments must also be qualified as fire fighters or police officers.

Professional societies such as the National Association of Emergency Medical Technicians (NAEMT) and the National Association for EMS Educators (NAEMSE) offer publications, education, training, networking opportunities, and other various career resources valuable to members as well as those interested in becoming and EMT.

Personal Qualifications

Emergency medical technicians should have emotional stability to deal with the job that involves life-or-death situations. EMTs must be alert to all that is going on. Clear thinking helps them get facts quickly from bystanders and from the emergency site. In an emergency self-confidence and calmness are vital. EMTs should be well-organized persons who can assess data swiftly. They should have good judgment to make quick, accurate decisions. EMTs must be able to follow orders, and they must be able to work well as members of a team. Because EMTs deal with people at their worst, they need good interpersonal and communications skills. Obviously, they must have a strong desire to help people, also.

Occupations can be adapted for workers with disabilities. Persons should contact their school or employment counselors, their state office of vocational rehabilitation, or their state department of labor to explore fully their individual needs and requirements as well as the requirements of the occupation.

Where Employed

According to the Bureau of Labor Statistics, employment in the United States for emergency medical technicians was about 196,000 in the year 2006. Most worked in private ambulance services, others were employed by municipal fire, police, or rescue squad departments, and a few worked in hospitals. Most paid EMTs work in large cities and towns. A great many unpaid volunteers work in small towns and rural areas.

Employment Outlook

Employment of emergency medical technicians will increase faster than average through the year 2014. A growing population with an expanding proportion of elderly persons will contribute to the need for these workers.
Opportunities will be plentiful in hospitals and with private ambulance services, however, the pay and benefits are usually low in this work. Competition will be stiff in fire, police, and rescue squad departments because of the attractive pay and benefits, and good job security. Prospects will be best for EMT - paramedics. There is a continual need for volunteer EMTs in rural and small town areas.

Although some new openings will occur because of expansion in emergency medical services, most openings will occur because of the high turnover among workers in this occupation. High-stress working conditions, limited advancement opportunities, and low pay and benefits contribute to the shaky employment base.

Entry Methods

Emergency medical technicians may find jobs through newspaper and Internet want ads as well as state and private employment agencies. Inquiries at places that employ EMTs, such as police and fire departments, hospitals, private firms, and the like, may produce jobs. The Yellow Pages of the telephone book list these places. Professional associations, such as the NAMED, lists job offers on their Web sites.

Teachers, nurses, and physicians who conduct EMT training programs may help students. Often these professionals hear about jobs. Students who do volunteer work at medical centers may hear of openings or learn of EMT training programs that will prepare them for this work.

Bulletin boards in hospitals may list jobs. Medical newsletters and journals often have job listings. As a rule, EMTs must be certified in order to transfer from one place to another. Those without any training enter this work by enrolling in EMT-Basic training programs.

Advancement

EMTs - basic may apply for EMT - intermediate training. Training for this certification is not always available locally. Those seeking the paramedic training may have to travel some distance to get this training.

EMTs who want to enhance their medical skills may branch out to other medical work. With more education and training they may become emergency department nurses, licensed practical nurses, physician assistants, dialysis technicians, or other paraprofessionals. Those with the ability to organize and take charge may become emergency medical services coordinators and educators. Some EMTs become fire fighters, police officers, or dispatchers. Healthcare reforms may create new opportunities for EMT personnel. Private firms often have career paths to supervisor, manager, or director.

For Further Research
National Association of Emergency Medical Technicians, P.O. Box 1400, Clinton, MS 39060-1400. Web site: www.naemt.org

National Association for EMS Educators, 681 Anderson Drive, Foster Plaza 6, Pittsburgh, PA 15220. Web site: www.naemse.org

National Registry of Emergency Medical Technicians, Rocco V. Morando Building, 6610 Busch Boulevard, P.O. Box 29233, Columbus, OH 43229. Web site: www.nremt.org

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