## **Paramedic Technical Standards**

## **Paramedic Characteristics**

The Paramedic must be a confident leader who can accept the challenge and high degree of responsibility entailed in the position. The Paramedic must have excellent judgement and be able to prioritize decisions and act quickly in the best interest of the patient, must be self-disciplined, able to develop patient rapport, interview hostile patients, maintain safe distance, and recognize and utilize communication unique to diverse multicultural groups and ages within those groups. Must be able to function independently at optimum level in a non-structured environment that is constantly changing.

Even though the Paramedic is generally part of a two-person team generally working with a lower skill and knowledge level Basic EMT, it is the Paramedic who is held responsible for safe and therapeutic administration of drugs including narcotics. Therefore, the Paramedic must not only be knowledge about medications but must be able to apply this knowledge in a practical sense. Knowledge and practical application of medications include thoroughly knowing and understanding the general properties of all types of drugs including analgesics, anesthetics, anti-anxiety drugs, sedatives and hypnotics, anti-convulsants, central nervous stimulants, psychotherapeutics which include antidepressants, and other anti-psychotics, anticholerginics, cholergenics, muscle relaxants, anti-dysrythmics, anti-hypertensives, anticoagulants, diuretics, bronchodilators, opthalmics, pituitary drugs, gastro-intestinal drugs, hormones, antibiotics, antifungals, antiinflammatories, serums, vaccines, anti-parasitics, and others.

The Paramedic is personally responsible, legally, ethically, and morally for each drug administered, for using correct precautions and techniques, observing and documenting the effects of the drugs administered, keeping one's own pharmacological knowledge base current as to changes and trends in administration and use, keeping abreast of all contraindications to administration of specific drugs to patients based on their constitutional make-up, and using drug reference literature.

The responsibility of the Paramedic includes obtaining a comprehensive drug history from the patient that includes names of drugs, strength, daily usage and dosage. The Paramedic must take into consideration that many factors, in relation to the history given, can affect the type medication to be given. For example, some patients may be taking several medications prescribed by several different doctors and some may lose track of what they have or have not taken. Some may be using nonprescription/over the counter drugs. Awareness of drug reactions and the synergistic effects of drugs combined with other medicines and in some instances, food, is imperative. The Paramedic must also take into consideration the possible risks of medication administered to a pregnant mother and the fetus, keeping in mind that drugs may cross the placenta.

The Paramedic must be cognizant of the impact of medications on pediatric patients based on size and weight, special concerns related to newborns, geriatric patients and the physiological effects of aging such as the way skin can tear in the geriatric population with relatively little to no pressure. There must be an awareness of the high abuse potential of controlled substances and the potential for addiction, therefore, the Paramedic must be thorough in report writing and able to justify why a particular narcotic was used and why a particular amount was given. The ability to measure and re-measure drip rates for controlled substances/medications is essential. Once medication is stopped or not used, the Paramedic must send back unused portions to proper inventory arena.

The Paramedic must be able to apply basic principles of mathematics to the calculation of problems associated with medication dosages, perform conversion problems, differentiate temperature reading between centigrade and Fahrenheit scales, be able to use proper advanced life support equipment and supplies (i.e. proper size of intravenous needles) based on patient's age and condition of veins, and be able to locate sites for obtaining blood samples and perform this task, administer medication intravenously, administer medications by gastric tube, administer oral medications, administer rectal medications, and comply with universal pre-cautions and body substance isolation, disposing of contaminated items and equipment properly.

The Paramedic must be able to apply knowledge and skills to assist overdosed patients to overcome trauma through antidotes, and have knowledge of poisons and be able to administer treatment. The Paramedic must be knowledgeable as to the stages drugs/medications go through once they have entered the patient's system and be cognizant that route of administration is critical in relation to patient's needs and the effect that occurs.

The Paramedic must also be capable of providing advanced life support emergency medical services to patients including conducting of and interpreting electrocardiograms (EKGs), electrical interventions to support the cardiac functions, performing advanced endotracheal intubations in airway management and relief of pneumothorax and administering of appropriate intravenous fluids and drugs under direction of off-site designated physician.

The Paramedic is a person who must not only remain calm while working in difficult and stressful circumstances, but must be capable of staying focused while assuming the leadership role inherent in carrying out the functions of the position. Good judgement along with advanced knowledge and technical skills are essential in directing other team members to assist as needed. The Paramedic must be able to provide top quality care, concurrently handle high levels of stress, and be willing to take on the personal responsibility required of the position. This includes not only all legal ramifications for precise documentation, but also the responsibility for using the knowledge and skills acquired in real lifethreatening emergency situations.

The Paramedic must be able to deal with adverse and often dangerous situations which include responding to calls in districts known to have high crime and mortality rates. Self-confidence is critical, as is a desire to work with people, solid emotional stability, a tolerance for high stress, and the ability to meet the physical, intellectual, and cognitive requirements demanded by this position.

## **Physical Demands**

Aptitudes required for work of this nature are good physical stamina, endurance, and body condition that would not be adversely affected by frequently having to walk, stand, lift, carry, and balance at times, in excess of 125 pounds. Motor coordination is necessary because over uneven terrain, the patient's, the Paramedic's, and other workers' well-being must not be jeopardized.

## **Comments**

The Paramedic provides the most extensive pre-hospital care and may work for fire departments, private ambulance services, police departments or hospitals. Response times for nature of work are dependent upon nature of call. For example, a Paramedic working for a private ambulance service that transports the elderly from nursing homes to routine medical appointments and check-ups may endure somewhat less stressful circumstances than the Paramedic who works primarily with 911 calls in districts known to have high crime rates. Thus, the particular stresses inherent in the role of the Paramedic can vary, depending on place and type of employment.

However, in general, in the analyst's opinion, the Paramedic must be flexible to meet the demands of the ever-changing emergency scene. When emergencies exist, the situation can be complex and care of the patient must be started immediately. In essence, the Paramedic in the EMS system uses advanced training and equipment to extend emergency physician services to the ambulance. The Paramedic must be able to make accurate independent judgements while following oral directives. The ability to perform duties in a timely manner is essential, as it could mean the difference between life and death for the patient.

Use of the telephone or radio dispatch for coordination of prompt emergency services is required, as is a pager, depending on place of employment. Accurately discerning street names through map reading, and correctly distinguishing house numbers or business addresses are essential to task completion in the most expedient manner. Concisely and accurately describing orally to dispatcher and other concerned staff, one's impression of patient's condition, is critical as the Paramedic works in emergency conditions where there may not be time for deliberation. The Paramedic must also be able to accurately report orally and in writing, all relevant patient data. At times, reporting may require a detailed narrative on extenuating circumstances or conditions that go beyond what is required on a prescribed form. In some instances, the Paramedic must enter data on computer from a laptop in ambulance. Verbal skills and reasoning skills are used extensively.

Source: USDOT 1998 National Standard Paramedic Curriculum