

FUNCTIONAL JOB ANALYSIS for EMS

Essential Functions

The following functional job analysis was developed by the Psychoeducational Clinic of Ohio State University, at the request of the Board of Directors of the National Registry of Emergency Medical Technicians. This job analysis was later endorsed by a committee comprised of members of the National Association of State EMS Directors and the National Council of State EMS Training Coordinators. The NREMT Board utilized this functional job analysis in the development of examination accommodations to meet the requirements of the Americans with Disabilities Act readers and persons interested in utilizing this functional job analysis should refer questions related to specific indicators to occupational rehabilitation specialists for interpretation.

EMS General Characteristics

EMS personnel work as part of a team. Thorough knowledge of theoretical procedures and ability to integrate knowledge and performance into practical situations are critical. Self-confidence, emotional stability, good judgment, tolerance for high stress, and a pleasant personality are also essential characteristics of the successful EMS personnel at any level. EMS personnel must be able to deal with adverse social situations, which include responding to calls in districts known to have high crime rates.

Physical Demands

Aptitudes required for work of this nature are good physical stamina, endurance, and body condition which would not be adversely affected by lifting, carrying, and balancing at times, patients in excess of 125 pounds (250 pounds, with assistance). The general work environment is a 24-hour continuous shift or various shift configurations. Motor coordination is necessary for the well-being of the patient, the EMT or paramedic, and coworkers over uneven terrain.

Driving the ambulance in a safe manner, accurately discerning street names through map reading, and the ability to correctly distinguish house numbers or business locations are essential to task completion in the most expedient manner possible. Use of the telephone for transmitting and responding to physician's advice is also essential. The ability to concisely and accurately describe orally to physicians and other concerned staff one's impression of the patient's condition is critical in emergency conditions in which there may be no time for deliberation. The EMS professional must also be able to accurately summarize all data in the form of a written report. Verbal and reasoning skills are used more extensively.

Spatial aptitude is required to visualize anatomic positions and the relationship between the point of forces and the area affected (as in traction); and to place treatment devices or administer manual treatment in relationship to the affected body part.

P – form Perception

Level P-2:6 – Diagnoses and treats diseases and disorders of animals. Ability to make visual comparisons and discriminations and see slight differences in shapes and shadings of figures and widths and lengths of lines. Form perception is required to perceive pertinent details of size, shape,

and form in skeletal structure, organs, tissue, and specimens of various animals.

Q – Clerical Perception

Level Q-2:19 (for Paramedic and Intermediate) – Renders general nursing care to patients in hospital, infirmary, sanitarium, or similar institution: Notes pertinent detail in written instructions, especially amounts and strengths of medications to administer; accurately perceives numbers when reading instruments, preparing medications, and filling syringes for injections; accurately records data on patients' charts such as temperature, respiration, pulse count, blood pressure, medications and dosage administered.

Level Q-3:3 (for Basic) – Prepares and compiles records in hospital nursing unit, such as obstetrics, pediatrics, or surgery: Clerical perception is required to post information to patients' charts from doctors' and nurses' notes and laboratory reports; to file charts in chart racks; to make up daily diet sheet for unit; and to maintain inventory of drugs and supplies.

K – Motor Coordination

K-2:5 – Renders general nursing care to patients in hospital, infirmary, sanitarium, or similar institution: Coordinates vision and finger and hand movements to give injections with hypodermic needle, medication, position or remove dressing and to measure medicines.

F – Finger Dexterity

F-1:2 – No description for EMT-Basic, however, Level 2 is recommended due to ability to wrap bandages and apply splints. The paramedic recommendation to manipulate small instruments, vials and accessories accompanying medication administration.

M – Manual Dexterity

Level M-2:12 – Renders general nursing care to patients in hospital, infirmary, sanitarium, or similar situation. Controls and extinguishes fires, protects life and property, and maintains equipment as volunteer or employee of city, township, or industrial plant. Manual dexterity is required during emergency situations, in positioning ladders and nets; clasp rungs to climb ladders; and in giving artificial respiration.

E – Eye-Hand-Foot Coordination

No description given for EMT-Basic. Level 2 recommended as job may require balancing of ladders, stairs, or walking on uneven terrain while carrying patient. Eye-hand-foot coordination is required to permit ambulance operation and balancing, lifting, transporting patient.

C – Color Discrimination

C-1:4 – Performs surgery to correct deformities, repair injuries, prevent diseases, and to improve functions in patients: Uses color discrimination and color memory in making diagnosis of patient's

affliction or condition, by recognizing any deviations in color of diseased tissue from healthy tissue; evaluating color characteristics such as hue and saturation of affected body parts; and making determination as to extent or origin of condition.

Temperaments **DFIJMPRSTV**

J – Adaptability to making generalizations, evaluations or decisions based on sensory or judgmental criteria.

Adaptability to making generalizations, judgments, or decisions based on measurable or verifiable criteria.

Adaptability to dealing with people beyond giving and receiving instructions.

Adaptability to performing under stress when confronted with emergency, critical, unusual, or dangerous situations: or in situations in which working speed and sustained attention are “make or break” aspects of the job.

Adaptability to situations requiring the precise attainment of set limits, tolerances, or standards.

Adaptability to performing a variety of duties, often changing from one task to another of a different nature without loss of efficiency or composure.

Interests **1a, 1b, 2a, 2b, 3a, 4a, 4b, 5a, 5b**

2b - A preference for activities of a scientific and technical nature.

4a – A preference for working for the presumed good of the people.

Physical Demands **SLMHV23456**

Explanation of terms:

1. Strengths
2. Climbing and/or balancing
3. Stooping, kneeling, crouching and/or crawling
4. Reaching, handling, and fingering and/or feeling
5. Talking and hearing
6. Seeing

Environmental Conditions **IOB234567**

Explanation of terms:

1. Word location (I=Indoors, O=Outdoors, B=Both)
2. Extreme cold, with or without temperature changes
3. Extreme heat, with or without temperature changes
4. Wet and/or humid
5. Noise and/or vibration
6. Hazards
7. Atmospheric conditions

**U.S. DEPARTMENT OF LABOR
MANPOWER ADMINISTRATION
Physical Demands and Environmental Conditions**

ESTAB. JOB TITLE **EMT-Paramedic**
ESTAB. & SCHED. NO. DOT TITLE & CODE

Code: F=Frequently
O=Occasionally
NP=Not present

PHYSICAL DEMANDS

COMMENTS

1. STRENGTH

a. Standing 45%
Walking 50%
Sitting 5%

1a. Very little time is spent sitting down, except for incident report writing.

b. Lifting F
Carrying F
Pushing O
Pulling 0

1b. EMTs are required to assist in lifting and carrying injured or sick persons to ambulance, removal from ambulance, and into emergency care setting.

2. CLIMING F
BALANCING F

2. Climbing and balancing are required for safe transport of patient.

3. STOOPING F
KNEELING F
CROUCHING F
CRAWLING F

3. Patients are often found injured or sick in locations where removal is possible only through EMT's stooping, kneeling, crouching, or crawling.

4. REACHING F
HANDLING F
FINGERING F
FEELING F

4. Transporting life saving equipment, arm extension, handling carefully patients in fragile conditions, feeling to assess vital signs are part of the nature of this position

5. TALKING
Ordinary F
Other NP
HEARING
Ord. Conv. F

5. Responding to patients, physicians, and coworkers through hearing is necessary in transmitting patient information and following directions.

Other F

- | | | |
|------------------|---|---|
| 6. SEEING | | 6. Sight is used to drive ambulances, distinguish landmarks, and visually inspect patients. |
| Acuity, Near | F | |
| Acuity, Far | F | |
| Depth Percept. | F | |
| Accommodat. | F | |
| Color Vision | F | |
| Field of Vision | F | |

RATINGS: S L M H VH 2 3 4 5 6

7. **GENERAL EDUCATION**
High school graduate or equivalent. Must be at least 18 years old.
8. **VOCATIONAL PREPARATION**
a. College: None, however, some EMT courses are taught at local colleges.
b. Vocational Education Courses: For EMT-Basic: 110 hours specialized training.
c. Apprenticeship: None
d. Implant Training: None
e. On-the-Job Training: During course of training, students will have engaged in various clinical experiences in supervised hospital and field settings. Amount of time spent varies.
f. Performance on Other Jobs: None
9. **EXPERIENCE:** None
10. **ORIENTATION:** None
11. **LICENSES, ETC:** Certification or Licensure.
12. **RELATION TO OTHER JOBS AND WORKERS**
Promotion: From EMT-Basic to EMT/Intermediate to (based on training)
Transfers: None
Supervision Received: Physicians
Supervision Given: None
13. **MACHINES, TOOLS, EQUIPMENT, AND WORK AIDS**
Ambulance, radio/telephone, extrication devices, cardiac monitors, defibrillator, injection needles, pneumatic anti-shock garments, stretchers, "jaws-of-life".
14. **MATERIALS AND PRODUCTS:** Bandages and tape, etc.