



MED EXPRESS
COMPANIES

A Legacy of Innovation in EMS

MedExpress Ambulance Service, Inc.
EMT / Paramedic
Validated Functional Job Description

March 24, 2010
(Revised April 14, 2010)

To MedExpress Applicant:

This functional job description describes in detail the physical and environmental demands required to perform the essential duties of this job. After reviewing this functional job description, please sign this document on the last page and indicate whether you believe that you can or cannot perform the essential duties of this job.

General Description of Job:

Employees are responsible for the safe, efficient, reliable, and environmentally complaint operation of assigned area. General duties include:

- Driving an ambulance safely.
- Maintaining emergency equipment and supplies (e.g., Lifepack EKG monitor, ACLS bag, O2 caddy) required for emergency care.
- Removing and loading equipment to and from ambulance such as stretcher, spine board, O2 tank.
- Documentation and preparation of reports related to services rendered.
- Performing CPR and other life saving procedures as required.



This job description describes in detail the physical and environmental demands required to perform the essential duties of an Emergency Medical Technician and Paramedic. After reviewing this description, please sign this document on the last page and indicate whether you believe that you can or cannot perform the essential duties of this job.

I. Physical Demand Requirements for Safe Job Performance

Physical demands described in this functional job description have been validated by on-site job analysis involving direct measurements. They are representative of the physical demands that must be met by an employee to successfully and safely perform the essential functions of this job. Although specific components of job demands are listed in detail in this document, the following information is a synopsis of key minimum physical demand requirements determined from a detailed job analysis:

- 01. POSTURAL DEMANDS:** Employee must have the ability to move the extremities and spine through a range of motion that will permit work to be safely performed at ground/floor to overhead levels. Flexing and twisting of the trunk, reaching and awkward postures are occasionally required when attending to people requiring emergency care, performing transfers, and performing CPR from a kneeling position. Must have sufficient hip and knee flexion range of motion to permit climbing in and out of an ambulance by using steps located 17.5 inches and 30.5”.
- 02. DEXTERITY DEMANDS:** Employee must have good dexterity and frequently use one and two hands throughout the work period when performing job specific tasks such as when using the hands to attend to a person requiring emergency medical care, lifting stretchers and spine boards, O2 tanks and handling other equipment and supplies,
- 03. GRIP STRENGTH DEMANDS:** Employee must have sufficient grip to lift and carry equipment, spine boards and stretchers.
- 04. CARDIORESPIRATORY DEMANDS:** Employee must have sufficient cardiorespiratory fitness to be able to work in various climates while lifting and carrying loads, pushing and pulling, climbing stairs while carrying equipment, assisting in transfers of heavy people from out of homes, apartments, vehicles, down stairs, and from ditches , gullies or other types of uneven terrain. Must be able to sustain CPR at the rate of 100 compressions per minute.

05. MINIMUM ESSENTIAL PHYSICAL CAPACITIES REQUIRED FOR JOB PLACEMENT:

The minimum essential physical capacities for job placement are based on a job physical demands validation analysis. The minimum physical demands required to perform the job safely take into consideration mechanical and personnel assistance that can be reasonably offered or made available without adversely affecting minimum job productivity standards and/or creating an undue hardship on the employer. The employer will consider accommodations for persons with protected disabilities.

Job placement will not be offered when a person is unable to demonstrate that he/she possesses the physical abilities to perform the minimum essential physical demands of the job safely and poses an immediate threat of harm to self or other workers. Based on physical demand validation performed by an independent ergonomic consultant, prior to job placement, the employee must be able to demonstrate that he/she can safely can:

- lift 170 lbs from 6.5 inches to 36.25 inches** (The weight lifted at the heavier head end of stretcher containing a person weighing 200 lbs from stretcher low position to full height position.)
- lift 140 lbs from 22 inches to 36 inches, hold at 36 inches for 5 seconds** (i.e., Lifting foot end of stretcher containing a 200 lb person from stretcher low position to full height position. An extra inch is required to clear the wheels.)

- lift 140 lbs from 2.5 inches to 36 inches (i.e., lifting a heavier head end of spine board containing a 200 lb person to top of stretcher.
- lift 80 lbs from knee level to 40.5 inches,
- carry 20 lbs in bag on shoulder, 17 lbs in one hand and 18 lbs in other hand for 100 feet,
- carry 20 lbs in bag on one shoulder and carry 18 lbs in one hand, climb up and down 36 steps,
- pull horizontally with a peak force of 170 f-lbs with two hands,
- push horizontally with a peak force of 20 f-lbs with two hands,
- stand and walk on a frequent basis with good balance,
- stoop, kneel, and squat on an occasional basis,

The basis for these physical demand requirements are described in the sections of this functional job description that follow. Frequency of material handling will vary considerably depending on operational conditions. The physical demands for certain jobs may actually exceed those listed above in certain situations. However, the employee is expected to seek assistance if material handling requirements cannot be performed safely.

II. General Physical Activities

Activity:	O	F	C	N	Activity:	O	F	C	N
01. Standing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. Seeing – Reading	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
02. Walking	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14. Reaching, High, Low, Level	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
03. Sitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15. Hearing - Speech Range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
04. Stooping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16. Depth Perception	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
05. Kneeling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17. Color Vision	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
06. Squatting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18. Lifting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
07. Body Twisting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19. Carrying	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
08. Crawling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20. Pushing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
09. Sense of Touch	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	21. Pulling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Manual Dexterity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22. Climbing Ladders	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Speaking Clearly	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	23. Climbing Stairs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Seeing Distant	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24. Balancing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

KEY:

O - Occasionally, less than 33% of work time
F - Frequently, 34 - 66% of the work time
C - Constantly , 67% - 100% of the time
N – Not a significant part of the job

III. Environmental Requirements

The work environment characteristics described here are representative of those that the employee encounters while performing the essential functions of this job.

	O	F	C	N
01. Extreme Cold - Below 30 ° F	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
02. Extreme Heat - Above 100 ° F	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
03. Dryness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
04. Wetness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
05. Humidity - Above 90%	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
06. Noise - Over 85 Decibels	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
07. Respirator - Breathing Apparatus	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
08. Confined/Cramped Spaces	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
09. Elevated Heights	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Working Around/With People	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Working Alone	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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IV. Airborne Contaminants & Chemicals in Work Environment

Dust; Diesel fumes; gasoline fumes, etc.

V. Validated Essential Material Handling Requirements

A. Lifting – Essential Requirements			
Lifting Methods	Weight in lbs Force in F-lbs	Frequency	Description Materials / Tool / Procedure
Two-handed lift from 6.5” to 36.25”	170 lbs	Occasional	Lifting head end of stretcher containing a 200 lb person from lower position of stretcher to highest position of stretcher
Two-handed lift from 2.5” to 36.25”	140 lbs per person	Occasional	Lifting heavier end of spine board containing a person weighing 200 lbs to place on top of a stretcher 36.25” above the ground
Two-handed stretcher lift from 22 inches to 36 inches and hold for 5 seconds	140 lbs	Occasional	Lift foot end of stretcher containing a 200 lb person to move stretcher into back of the ambulance
Two-handed lift from knee level to 40.5”	80 lbs	Occasional	Lifting O2 bottle into storage container located in the back of an ambulance

B. Carrying – Level Surface					
Method	Weight Carried	Coupling	Minimum Distance	Frequency	Material / Tool
Carry bag strapped over one shoulder and carry weight in one hand.	20 lbs on shoulder and 18 lbs in other hand	Good	100 ft	Occasional	Lifepak EKG Monitor (20 lbs), ACLS bag (18 lbs) and O2 Caddy (17 lbs)

C. Carrying and Stair Climbing				
Method	Weight Carried	Steps climbed (up and down)	Frequency	Material / Tool
Carry equipment, one bag strapped over the shoulder and the other carried by one hand. Free hand used on the railing for safety	20 lbs strapped over the shoulder, 18 lbs carried by one hand	Climb up and down 36 steps	Occasional	Lifepak EKG Monitor (20 lbs), ACLS bag (18 lbs) and O2 Caddy (17 lbs)

D. Pushing / Pulling - Essential Requirements					
Push Force (F-lbs)	Pull Force (F-lbs)	Frequency	Distance (Ft):	Hand Position	Material/Tool:
n/a	170 f-lbs	Occasional	n/a	Waist level	Pull force to transfer 200 lb person on a draw sheet from one stretcher to another.
20 f-lbs	n/a	Occasional	n/a	Waist level	Push force on stretcher over cement..

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VI. Physical Demand Level (PDL) Description

FREQUENCY	Sedentary	Sed-Light	Light	Light-Med	Medium	Med-heavy	Heavy	Very Heavy
O - Occasional 1 - 33%	10 lbs	15 lbs	20 lbs	35 lbs	50 lbs	75 lbs	100 lbs	> 100 lbs
F- Frequent 34 - 66%	-----	7 Lbs	10 lbs	17 lbs	25 lbs	37 lbs	50 lbs	> 50 lbs
C - Constant 67% +	-----	-----	-----	5 lbs	10 lbs	15 lbs	20 lbs	> 20 lbs
	Sit	Sit/Stand	Stand/Walk	Stand/Walk	Stand/Walk	Stand/Walk	Stand/Walk	Stand/Walk

VII. Physical Demand Level Classification

Employees identified in this document must be able to perform up to heavy-very heavy physical labor as classified by the United States Departments of Labor. Physical demands typically involve lifting, carrying, pushing, and pulling.

VIII. Cardiorespiratory Demands

Employee must have sufficient cardiorespiratory fitness to perform the essential tasks of this job safely. Employee must be able to safely tolerate over heavy to very heavy demands on the cardiorespiratory system.

IX. Energy Expenditure

Employee must have an aerobic capacity sufficient for energy expenditure of 5.6 to over 7.5 METS which is consistent with a PDL classification of heavy to very heavy as classified by the United States Department of Labor.

PDL:	HEART RATE:	ENERGY EXPENDITURE
SEDENTARY	70 – 80	1.5-2.1 METS
LIGHT	81 – 90	2.2-3.5 METS
MEDIUM	91 – 110	3.6-5.5 METS
HEAVY	111- 130	5.6-7.5 METS
VERY HEAVY	Over 130	Over 7.5 METS

METS - Job demands can be expressed in METS, or metabolic equivalents, related to a person’s resting oxygen usage, and compared to the worker’s performance on a comparable aerobic capacity test.

X. Validated Materials Handled and Weights (Lbs)

Material weights and handling forces have been accurately measured and determined to be representative of the type of materials and forces required to perform the essential duties of work performed by employees identified in this document. The primary physical demands observed and measured during this analysis included lifting, carrying, pushing, and pulling.

No.	Description	Weight in Lbs / Force in F-Lbs
01.	Stretcher lift, head end, with 200 lb person	150 lbs
02.	Stretcher lift, foot end, with 200 lb person	140 lbs
03.	Spine board lift with 200 lb person	140 lbs
04.	O2 Tank	80 lbs
05.	Lifepak EKG Monitor	20 lbs
06.	ACLS Bag	18 lbs
07.	Oxygen Caddy	17 lbs
08.	Pull force to transfer 200 lb person from stretcher to stretcher	170 f-lbs
09.	Push force to push stretcher on level cement	20 f-lbs

XI. Special Requirements

Must be EMT certified

XII. Guidelines for Physical Demand Validation (PDV) Analysis

Physical demand validation analysis was performed based on guidelines established by the United States Department of Labor (USDL) and the Occupational Safety and Health Administration (OSHA). Validation of physical demands of job tasks is required for developing an accurate and valid functional job description as required by guidelines consistent with the Americans with Disabilities Act (ADA) and EEOC regulations for fair hiring practices. The physical demands described in this functional job description represent typical physical demand requirements of job tasks analyzed. Physical demands may at times exceed those identified in this report. Employees are required to adhere to all safety guidelines established by the employer and seek assistance to perform any task which they may feel exceeds their

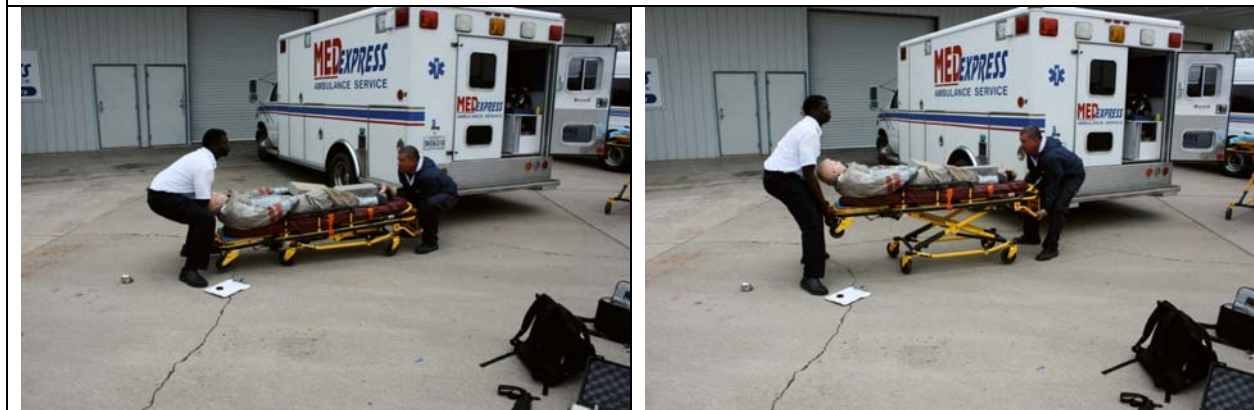
safe capacities to perform.

XIII. Methods of PDV Analysis

1. Personal interview, questionnaires, and on-site direct observation of job activities.
2. Measurements of material handling forces using push-pull dynamometers and weight scales.
3. Measurements of material dimensions, distances, heights, and reaches using tape measures.
4. Photography

Physical demand validation analysis performed by Industrial Safety & Rehabilitation (ISR) Institute, Inc., under the direction of Richard W. Bunch, Ph.D., P.T., C.B.E.S., 1516 River Oaks Dr. West, New Orleans, LA 70123.

XIV. Photographic Records









1. A dummy weighing 200 lbs was used to validate physical demands for EMTs/Paramedics. The EMT/Paramedic must be able to perform a stretcher lift using proper lift technique. The lift begins with hand placement at 6.5” above the ground requiring a squat lift technique.

2. Hand placement for the mid-position of the stretcher lift is 13.5 inches.



3. – 4. To fully elevate the stretcher, the hands are located 36.25” at the head end of the stretcher and 22” at the lowest of the two handles located at the foot end of the stretcher. Lifting a 200 lb person requires a lifting a weight of 170 lbs.

	
<p>5. Head position of stretcher handle: 36.25 inches</p>	<p>6. Position of stretcher handles: 22 and 30 inches</p>
	
<p>6. Stretcher handle at lowest position - 6.5 inches</p>	<p>7. Handle diameter- 4.75 inches</p>
	
<p>8. Width of handle- 21 inches</p>	<p>Low handle of back of stretcher is located 35" above the ground when the stretcher is placed into the ambulance.</p>



Placing head end of stretcher on floor of ambulance.



Lifting foot end of stretcher as wheels are retracted.



Spine board lift of 200 lb person requires ability to lift up to 140 lbs of force per person.



Lift of the spine board to 36.25"



Spine boards are 20 lbs in weight and measure 72" in length, 18" in width and 1.75" in height



EMTs / Paramedics must be able to squat /kneel to help position a person on a spine board.



O2 bottles weigh 80 lbs and are 46 inches in height and 22.25 inches in outer diameter. They are moved on average 10 feet but can be carried by a dolly. Therefore, manual carrying of an 80 lb O2 bottle is not essential.



Lifting an O2 bottle to load or unload into the back of an ambulance is an essential requirement of the job requiring the ability to lift 80 lbs from knuckles to waist level as shown using safe body mechanics.



Positioning the O2 tank at waist level to slide it into the storage container in them ambulance located 40.5 inches above the ground.



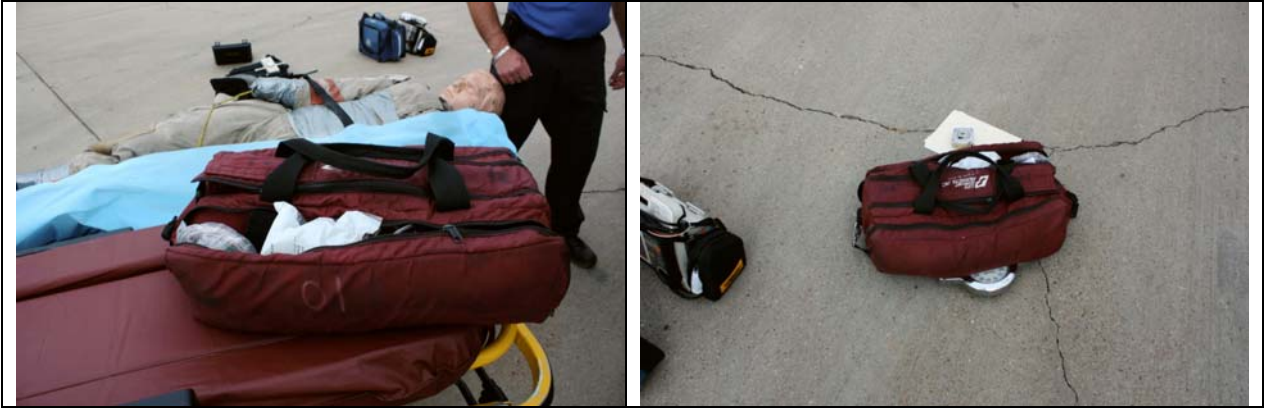
A peak horizontal pull force is required to transfer 200 lb person from one stretcher to another.



Lifepak Portable EKG Monitor measuring 19"x14" x 8.5" weighing 20 lbs is carried by a shoulder strap.



ACLS Bag measuring 23"x9"x14" has a shoulder strap for carrying and weighs 18 lbs.



O2 Caddy measuring 14"x24"x7" weighing 17 lbs



May have to carry one, two or all three bags weighing up to 55 lbs



EMTs/Paramedics must be able to perform CPR while kneeling and conduct 100 compressions per minute



Climbing in and out of an ambulance requires ability to flex the hip and knee sufficiently to step up 17.5 inches for the 1st step and 30.5” to the 2nd step.

FOR APPLICANT:

Once you have completed reading the entire job description, please read and sign off on the appropriate response below:

_____ I believe I am capable of performing the essential duties of this position.

_____ I do not believe that I am capable of performing the essential duties of this position.

Printed Name

Signature

Date

