

Orientation Guide
Town of Colonie EMS Department



PAT
Physical Ability Test

***For questions related to the PAT program, please contact the
Town of Colonie Civil Service Office at 518-783-2721 or the EMS
Department at 518-782-2645.***

Physical Ability Test Orientation Guide

Overview

This physical ability test (PAT) consists of eight separate events. The PAT is a sequence of events requiring you to progress along a predetermined path from event to event in a continuous manner. This test was developed to allow the EMS Department to obtain pools of trainable candidates who are physically able to perform essential job tasks at EMS incidents. **This is a Pass/Fail test.**

Throughout all events, you must wear long pants, and footwear with no open heel or toe. Gloves are recommended but not required. **Watches and loose or restrictive jewelry are not permitted.** All props were designed to obtain the necessary information regarding your physical ability. The tools and equipment were chosen to provide the highest level of consistency, safety and validity in measuring your physical abilities.

A schematic drawing of the PAT is included in this orientation material; however, the course layout may vary in order to conform to the EMS Department's test area. The events and distances between events are always the same. The events are placed in a sequence that best simulates EMS scene events while allowing a brief walk between events.

To ensure the highest level of safety and to prevent exhaustion, no running is allowed between events.

Test Forms

You must present valid identification and sign in before taking the PAT. Prior to the start of the PAT you must provide medical authorization from your physician indicating you're medically cleared to take the PAT test. It is your responsibility to ask questions if you do not understand any parts of the test events or procedures. You are required to complete the Waiver and Release Form.

Appeal Process

After a review of the PAT test and a candidate feels he/she may have an Issue completing an event, the candidate may appeal the event in writing at least three business days prior to the PAT test being administered. The appeal should be sent to the Town of Colonie Civil Service Office Attention Appeals Committee EMS PAT test. The Appeals Committee will meet prior to the PAT test to address appeals and advise candidates of the outcome of their appeal prior to the test.

Event 1 Stair Climb with Equipment

Equipment

Three Items of primary care equipment weighing approximately 72 pounds.
One flight of stairs (16 - 24 stairs, location dependent)

Purpose of Evaluation

This event is designed to simulate the critical tasks of climbing stairs with a full complement of primary care EMS equipment. This event challenges your aerobic capacity, and your upper and lower body muscular endurance.

Event

The candidate will pick up three EMS primary care bags and signal to the evaluator he/she is ready to start. The evaluator will then advise the candidate to start. The candidate will climb a flight of stairs touching each stair. The candidate will climb and descend the flight stairs twice. Upon completing the stair climb, the candidate will negotiate through two doors without putting any of the equipment down. The candidate will walk to the next event. Upon arrival at the next event, the candidate will place the three EMS bags down without dropping them. The candidate may not stop and rest.

Failures

Once the candidate has picked up the three primary EMS bags he/she may not put them down until they have reached the next event. If a candidate drops or sets the equipment down prior to reaching the next event, the candidate will fail the event and the PAT. The candidate must touch each stair of the stair climb. Failure to touch a stair will result in a failing grade for the event and the PAT. The candidate may not stop and rest.

Event 2 Patient Rescue

Equipment

One 165 lbs. manikin with full body harness
75' line

Purpose of Evaluation

This event is designed to simulate the critical task of removing a victim or injured partner from a rescue scene. This event challenges your aerobic capacity, upper and lower body muscular strength and endurance, grip strength and endurance, and anaerobic endurance.

Event

The candidate must put down without dropping the primary EMS equipment bags from event 1 and initiate a rescue after arriving at the manikin's side. The candidate must drag a 165 lbs. weighted manikin. The candidate must drag the manikin 75' following a line on a preset pathway. The candidate may set the manikin down to adjust his/her grip once. The candidate may not stop and rest. The manikin's head and shoulders must remain off the ground.

Failures

The candidate may only stop to reset his/her grip once. If a candidate stops to rest or drops the manikin's head to the ground, the candidate will fail the event and the PAT.

Event 3 Chest Compressions

Equipment

One standard CPR manikin.

Purpose of Evaluation

This event is designed to simulate the critical task of chest compressions while performing CPR on an arrested patient. This event challenges your aerobic capacity, upper body muscular strength and endurance, upper back muscular strength and endurance.

Event

Chest compressions must be hard and fast at least at rate of 100 compressions per minute. The evaluator will start the clock as soon as the first compression is completed. The candidate will continue to compress the manikin's chest for two minutes. The evaluator will advise the candidate when two minutes has elapsed. The candidate will then proceed directly to the next event without stopping.

Failures

The candidate will not stop compressions once started. If the candidate stops prior to the evaluator advises the completion of two minutes, the candidate will fail the event and the PAT.

Event 4 Lift a 165 lbs. patient attached to a backboard

Equipment

One 165-rescue manikin
Long backboard with straps

Purpose of Evaluation

This event challenges your aerobic capacity, upper body muscular strength, lower body muscular strength, balance, grip strength, and anaerobic endurance. This event is designed to simulate moving a patient around two narrow corners in a home.

Event

The candidate must pick up the head end of a 165 lbs. manikin attached to a backboard that will be butted up against a wall. The candidate must raise one end of the backboard in up to three movements. The first movement will require the candidate to raise the head of the backboard to the waist level. The second movement will require the candidate to lift the head of the backboard from the waist level upwards to a full arm extension. If a change of position is needed the second lift can be accomplished in two movements. This patient lift must be completed twice from waist level.

Failures

If the candidate drops the patient, stops to rest, or is unable to complete the lift, the candidate will fail the event and the PAT. If the candidate requires more than three movements to lift the backboard to a full arm extension, the candidate will fail the event and the PAT.

Event 5 Carry 120lb barbell backward 75'

Equipment

One 120 lbs. curl barbell
75' line

Purpose of Evaluation

This event challenges your aerobic capacity, upper body muscular strength, lower body muscular strength, balance, grip strength, and anaerobic endurance. This event is designed to simulate half of a loaded stretcher.

Event

The candidate must pick up a 120 lbs. curl barbell and walk backwards for 75'. The candidate may set the barbell down once to adjust his/her grip. The candidate is not allowed to stop and rest during the carry.

Failures

If the candidate drops the barbell or stops to rest during the carry, the candidate will fail the event and the PAT.

Event 6 Confined Space Crawl

Equipment

This event uses a 24" X 10' blacked pipe

4 traffic cones

2 blankets

Purpose of Evaluation

The purpose of this event is to determine if a candidate can crawl through a confined space to treat a trapped victim.

Event

Upon completion of the previous event the candidate must enter a darkened black pipe and negotiate their way through the pipe to the exit.

Failures

If a candidate is unable to enter and negotiate their way through the pipe they will fail the event and the PAT.

Event 7 Ladder Climb

Equipment

16' extension ladder

harness

150' rope and belay system

2 15' pieces of 1" tubular webbing

Purpose of Evaluation

The purpose of this event is to determine if a candidate is capable of climbing to a height to treat an injured victim.

Event

The candidate will start the event by putting on safety equipment provided (helmet and harness). The candidate will be attached to a belay line for safety. The candidate must ascend the ladder to the top and then descend the ladder to the ground.

Failures

If a candidate is unable to reach the top of the ladder or requires assistance from the belay line, the candidate will fail the event and the PAT.

Event 8 Cardiac Arrest Management with AED / Megacode

Equipment

Examination gloves

CPR mannequin (+ shock discharge device for ALS)

Automated external defibrillator (Cardiac Monitor + rhythm generator for ALS)

Bag-valve-mask

Oropharyngeal airway

Oxygen tank, regulator and flowmeter

Oxygen connecting tubing

Evaluation

EMT Candidates – This station is designed to test your ability to manage a prehospital cardiac arrest by integrating CPR skills, defibrillation, airway adjuncts and patient/scene management skills. There will be an EMT assistant in this station. The EMT assistant will only do as you instruct. As you arrive on the scene you find a patient on the floor. You must immediately establish control of the scene and care of the patient. At the appropriate time, the patient's airway must be controlled and you must ventilate the patient.

*See skill sheet

Paramedic Candidates - The candidate is evaluated on their ability to manage cardiac arrhythmias and interpret ECGs. You will be evaluated on your ability to manage a cardiac arrest situation, including actual delivery of electrical therapy and "voicing" all interpretations and treatments given a scenario.

*See skill sheet

Event

The candidate will complete a patient care scenario with the Medical Director (or their designee) present. Scenario may be recorded for additional review.

Failures

Candidate fails to perform to current protocols or standards.

Preparation for the Physical Ability Test

The Physical Ability Test consists of eight critical physical tasks that simulate actual job duties in the EMS service. This test is physically demanding and requires that you be physically fit to be successful. This guide was developed to assist you with physically preparing yourself for the test.

What is physical fitness in the EMS Service?

Physical fitness is the ability to perform physical activities, such as job tasks, with enough reserve for emergency situations and to enjoy normal activities when off duty.

What are the major areas of fitness?

The major areas of physical fitness include:

- flexibility
- cardiopulmonary endurance
- muscular strength
- muscular endurance

Body composition is also considered an area of physical fitness. It should be noted that excess body fat increases the workload placed upon the body and decreases the body's ability to dissipate heat. A proper physical fitness program should be specific for the job of EMS provider. It should include all of the major areas of physical fitness mentioned above and be a total body program. Although this is best accomplished at a gym with an array of equipment, this guide also includes exercises that require little or no equipment.

Hydration

Proper hydration is critical. All candidates should drink water before exercise, during exercise and after exercise. Additionally, you should drink at least one liter of water one hour before your PAT.

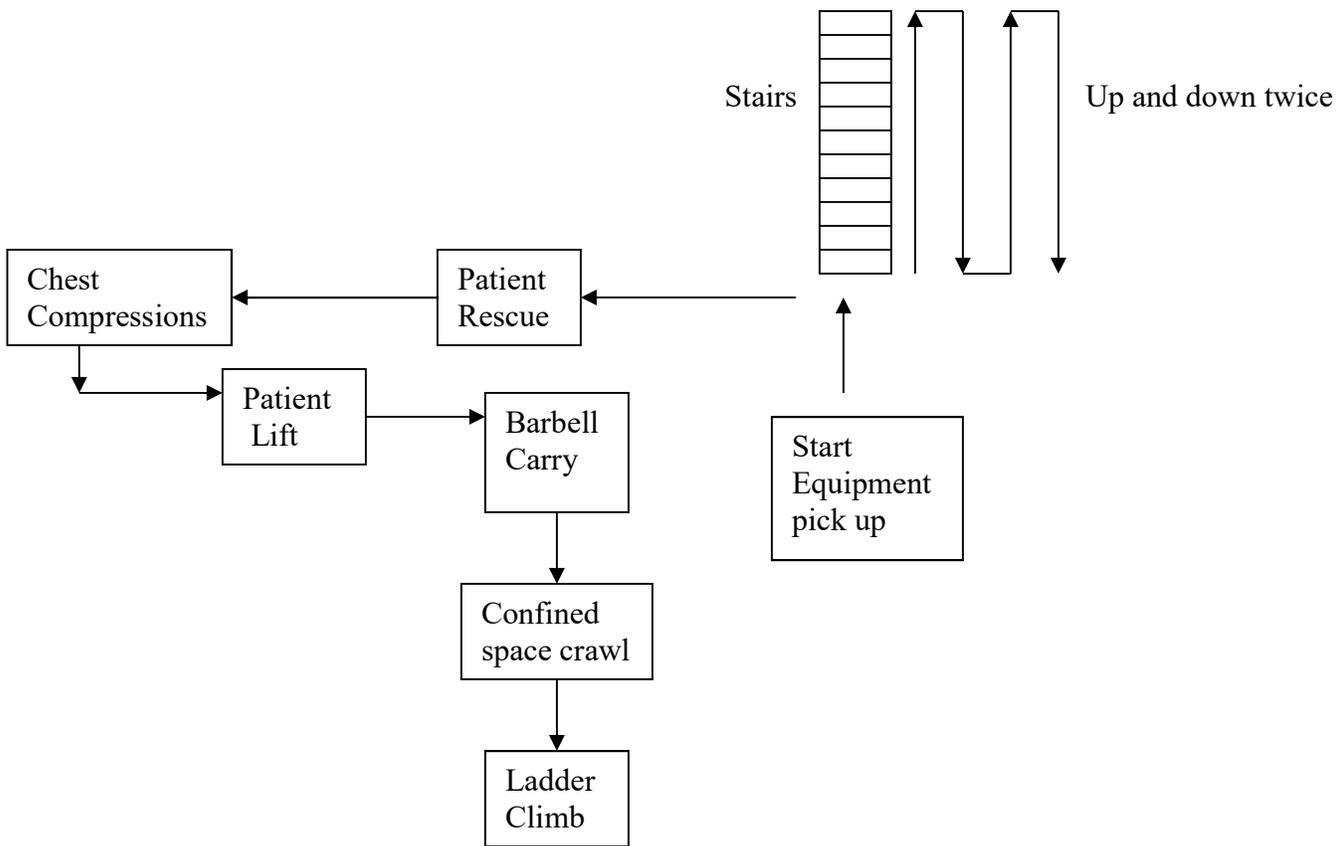
Warm-up & Flexibility

A warm-up serves several functions, including:

- increased blood flow to working muscles and joints
- decreased likelihood of injury
- decrease in pre-event tension
- possible improved performance
- Improved flexibility

A proper warm-up should begin with a few of minutes of the same type of activity you are about to do at a very light exertion level. For example, if you are preparing to go running you should run in place or for a short distance at a very easy pace. The next step is to stretch to improve flexibility and further your warm-up. There are two phases of stretching. The first phase is the easy stretch. In this phase, you should hold the stretch for 10 seconds in a range of motion that produces only mild tension. This prepares you for the second phase, the developmental stretch. In this phase, you should move slightly farther to the point where you feel a little more tension. This should be held for another 10 seconds.

Colonie EMS PAT Participant Diagram



The layout of the PAT may change slightly depending on the facility used to conduct the test.

CARDIAC ARREST MANAGEMENT AED

INSTRUCTIONS TO THE CANDIDATE

This station is designed to test your ability to manage a prehospital cardiac arrest by integrating CPR skills, defibrillation, airway adjuncts and patient/scene management skills. There will be an EMT assistant in this station. The EMT assistant will only do as you instruct. As you arrive on the scene you find a patient on the floor. You must immediately establish control of the scene and care of the patient. At the appropriate time, the patient's airway must be controlled and you must ventilate *or* direct the ventilation of the patient using adjunctive equipment. You may use any of the supplies available in this room. You have 15 minutes to complete this skill station. Do you have any questions?

NOTES

STATION
3

**CARDIAC ARREST
MANAGEMENT
AED**

Pass _____
Fail _____

Please Print
Candidate _____
Examiner _____ Initials _____
Date _____ Start Time _____ Stop Time _____

Points: *Possible* *Achieved* Comments

	Points	Possible	Achieved	Comments
ASSESSMENT & INITIAL TREATMENT	Takes or verbalizes, body substance isolation precautions	C		
	Appropriately assess patient and confirms no pulse	1		
	Directs rescuer to begin single rescuer CPR	1		
	Assures adequate CPR and adequate (visible) chest rise during ventilations	1		
	Properly attaches AED pads in the correct locations	1		
	Turns on AED	1		
	Directs rescuer to stop CPR	1		
	Ensures all individuals are clear of the patient	C		
	Initiates analysis of the patient's rhythm	1		
	Delivers one (1) shock	C		
INTEGRATION	TRANSITION	1		
	Immediately begins 2 rescuer CPR without performing a pulse check (candidate must be performing ventilations)(continues for 2 full minutes)			
	Assures adequate CPR and adequate (visible) chest rise during ventilations	1		
	Verbalizes insertion of a simple airway adjunct (oral/nasal airway)	1		
	Assures high concentration of oxygen is delivered to the patient	1		
	Assures CPR continues without unnecessary/prolonged interruption during the 2 minutes	1		
	Directs rescuer to stop CPR	1		
	Ensures all individuals are clear of the patient	C		
	Initiates analysis of the patient's rhythm	1		
	Delivers one (1) shock	C		
Immediately begins 2 rescuer CPR without performing a pulse check (candidate should be performing ventilations)				
Verbalizes transportation of patient	1			
Candidate did not initiate first shock within 90 seconds of arrival	C			
Candidate did not initiate/resume CPR at appropriate times	C			
Candidate operated the AED improperly or unsafely	C			
Stops compressions to attach AED	C			
Candidate failed to assure appropriate compression-to-ventilation ratios	C			
Candidate completed station within 15 minute time limit	C			
Note: Candidate must complete all critical criteria and receive at least 11 points to pass this station.	15			

COMMENTS:



Adapted from NREMT
 NREMT
 1001 10th St
 N.W.
 Washington, DC 20004

New York State Department of Health
 Bureau of Emergency Medical Services

Critical Care & Paramedic Practical Examination
 CARDIAC ARREST SKILLS STATION
 DYNAMIC CARDIOLOGY

STATION
5 - B

Candidate: _____ Examiner: _____
 Date: _____ Signature: _____
 Set # _____ Time Start: _____ Time End: _____

Takes or verbalizes infection control precautions	1	
Checks level of responsiveness	1	
Checks ABC's	1	
Initiates CPR if appropriate (verbally)	1	
Performs "Quick Look" with paddles	1	
Correctly interprets initial rhythm	1	
Appropriately manages initial rhythm	2	
Notes change in rhythm	1	
Checks patient condition to include pulse and, if appropriate, BP	1	
Appropriately manages second rhythm	2	
Notes change in rhythm	1	
Checks patient condition to include pulse and, if appropriate, BP	1	
Correctly interprets third rhythm	1	
Appropriately manages third rhythm	2	
Notes changes in rhythm	1	
Checks patient condition to include pulse and, if appropriate, BP	1	
Correctly interprets fourth rhythm	1	
Appropriately manages fourth rhythm	2	
Orders high percentages of supplemental oxygen at proper times	1	

TOTAL TO PASS 17 TOTAL 24

CRITICAL FAILURE

- Failure to deliver first shock in a timely manner due to operator delay in machine use or providing treatments other than CPR with simple adjuncts
- Failure to deliver second or third shocks without delay other than the time required to reassess and recharge paddles
- Failure to verify rhythm before delivering each shock
- Failure to ensure the safety of self and others (verbalizes "All clear" and observes)
- Inability to deliver DC shock (does not use machine properly)
- Failure to demonstrate acceptable shock sequence
- Failure to order initiation or resumption of CPR when appropriate
- Failure to order correct management of airway [ET when appropriate]
- Failure to administration of appropriate oxygen at proper time
- Failure to diagnose or treat 2 or more rhythms correctly
- Orders administration of an inappropriate drug or lethal dosage
- Failure to correctly diagnose or adequately treat v-fib, v-tach, or asystole

You must factually document your rationale for checking any of the above critical items on the reverse side of this form.