

**Orientation Guide**  
***Town of Colonie EMS Department***



**PAT**  
**Physical Ability Test**

# 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. Candidates must bring a towel and appropriate swimming attire. 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 lb 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 lb 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 lb patient attached to a back board**

### **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 lb 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 lb 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 lb 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 Swim**

### **Equipment**

75' swimming pool

### **Purpose of Evaluation**

To determine if a candidate is capable of swimming and has the basic water skills to complete water rescue training.

## **Event**

The candidate will remove outer clothing quickly. The candidate must shower prior to entering the water. The candidate must enter the water safely and swim 150' (2 laps) using whatever swim stroke the candidate is comfortable with.

## **Failures**

The candidate must complete the swim without stopping or being rescued.

## **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.



*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.*