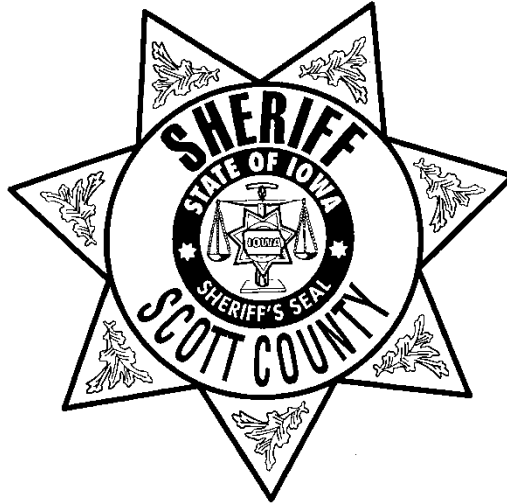


**Physical Standards for  
Scott County Deputy Sheriffs**



**Scott County Civil Service Commission**

## **What is physical fitness?**

Physical fitness is a status pertaining to the individual officer having the physiological readiness to perform maximum physical effort when required.

Physical fitness consists of three areas:

- Aerobic capacity or cardiovascular endurance pertaining to the heart and vascular system's capacity to transport oxygen. It is also a key area of heart disease in that low aerobic capacity is a risk factor.
- Strength pertains to the ability of muscles to generate force. Upper body strength and abdominal strength are important areas in that low strength levels have a bearing on upper torso and lower back disorders.
- Flexibility pertains to the range of motion of the joints and muscles. Lack of lower back flexibility is a major risk area of lower back disorders.

## **Why is fitness important as a job related element for law enforcement officers?**

- It has been well documented that law enforcement personnel (as an occupational class) have serious health risk problems in terms of cardiovascular disease, lower back disorders and obesity. Law enforcement agencies have the responsibility of minimizing known risk. Physical fitness is a health domain which can minimize the "known" health risk for law enforcement officers.
- Physical fitness has been demonstrated to be a bonafide occupational qualification (BFOQ). Job analysis that account for physical fitness have demonstrated that the fitness areas are underlying factors determining the physiological readiness to perform a variety of critical physical tasks. These three fitness areas have also been shown to be predictive of job performance ratings, sick time and a number of commendations of police officers. Data also shows that fitness level is predictive of trainability and academy performance.
- Physical fitness can be an important area for minimizing liability. The unfit officer is less able to respond fully to strenuous physical activity. Consequently, the risk of not performing physical duties is increased.

## How will physical fitness be measured?

The Physical Fitness Test Battery consists of four basic tests. Each test is a scientifically valid test. The tests will be given in sequence with a rest period between each test.

### 1. SIT AND REACH TEST

This is a measure of the flexibility of the lower back and upper leg area. It is an important area of performing police tasks involving range of motion and is important in minimizing lower back problems. The test involves stretching out to touch the toes or beyond with extended arms from a sitting position. The score is in inches reached on a yard stick fastened to an apparatus with 15 inches being at the toes and the one inch mark closest the body. Knees must be locked and the hands together as the person stretches down the measuring apparatus.



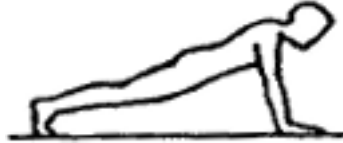
### 2. 1 MINUTE SIT UP TEST

This is a measure of the muscular endurance of the abdominal muscles. It is an important area of performing police tasks that may involve the use of force and is an important area for maintaining good posture and minimizing lower back problems. The score is in number of bent leg sit-ups performed in 1 minute. Hands must remain on or about the head, in the up position, elbows should touch the knees or upper portion of the thigh, in the down position, the back must come down so that shoulder blades touch the floor. Legs may be held for assistance.



### **3. 1 MINUTE PUSH UP TEST**

This test requires pushing one's own weight off the floor. This measures the amount of force the upper body can generate and is an important area of performing police tasks requiring upper body strength. The number of push-ups performed in one minute calculates the score. The body is supported by the hands and feet touching the ground, with legs straight and off the ground. The chest must come down and touch a fist placed under the individual's chest, and then the arms must go to full extension to complete a push up.



### **4. 1.5 MILE RUN**

This is a timed run to measure the heart and vascular system's capability to transport oxygen. It is an important area of performing police tasks involving stamina and endurance and to minimize the risk of cardiovascular problems. The score is in minutes and seconds.



## What are the standards?

- The actual performance requirement for each test is based upon norms from a national population sample.
- The applicant must pass every test.
- The required performance to pass each test is based upon sex and age (decade). The absolute performance is different for the eight categories; the relative level of effort is identical for each age and sex group. All recruits are being required to meet the same percentile rank in terms of their respective age/sex group. The performance requirement is that level of physical performance that approximates the 40th percentile for each age and sex group.

### Minimal physical fitness Performance requirements chart

Test MALE AGE	20-29	30-39	40-49	50-59	60+
Sit & Reach	16.5	15.5	14.3	13.3	12.5
1 minute sit up	38	35	29	24	19
1 minute push up	29	24	18	13	10
1.5 mile run	12:51	13:36	14:29	15:26	16:43

Test FEMALE AGE	20-29	30-39	40-49	50-59	60+
Sit & Reach	19.3	18.3	17.3	16.8	15.5
1 minute sit up	32	25	20	14	6
1 minute push up	15	11	9	*12	*5
1.5 mile run	15:26	15:57	16:58	17:54	18:44

*\*Females in excess of 49 years of age may do push ups on their knees. Normative data for these age groups have not been established.*

## How does one prepare for the test?

### 1. Preparing for the sit and reach test.

Performing sitting types of stretching exercises daily will increase this area. There are two recommended exercises.

Sit and reach. Do 5 repetitions of the exercise. Sit on the ground with legs straight. Slowly extend forward at the waist and extend the fingertips toward the toes (keeping legs straight). Hold for 10 seconds.



Towel Stretch. Sit on the ground with legs straight. Wrap a towel around the feet holding each end with each hand. Lean forward and pull gently on the towel extending the torso toward the toes.



### 2. Preparing for the sit up test.

The progressive routine is to do as many bent leg sit ups (hand behind the head) as possible in 1 minute. At least 3 times a week do 3 sets (3 groups of the number of repetitions one did in 1 minute.)

### 3. Preparing for the push up test.

If one has access to weights, determine the maximum weight one can bench press one time. Take 60% of that poundage. This will be the training weight. One should be able to do 8-10 repetitions of that weight. Do 3 sets of 8-10 repetitions adding 2.5 pounds every week.

If one does not have weight equipment, then the push up exercise can be utilized. Determine how many push ups one can do in one minute. At least 3 times a week do 3 sets of the amount one can do in one minute.

### 4. Preparing for the 1.5-mile run.

Following is a graduated schedule that would enable one to perform a maximum effort for the 1.5-mile run. If one can advance the schedule on a weekly basis, then proceed to the next level. If one can do the distance in less time, then that should be encouraged.

Week	Activity	Distance	Time in Min.	Frequency
1	Walk	1 mile	20-17	5/week
2	Walk	1.5 mile	29-25	5/week
3	Walk	2 miles	35-32	5/week
4	Walk	2 miles	30-28	5/week
5	Walk/Jog	2 miles	27	5/week
6	Walk/Jog	2 miles	26	5/week
7	Walk/Jog	2 miles	25	5/week
8	Walk/Jog	2 miles	24	4/week
9	Jog	2 miles	24	4/week
10	Jog	2 miles	22	4/week
11	Jog	2 miles	21	4/week
12	Jog	2 miles	20	4/week

Revised: 6/3/98/sc; 7/16/99/m; 1/6/00/m; 5/4/01/m; 7/31/01/m; 9/13/01/sc; 4/02/02/m; 8/19/04/m; 8/17/07/sc