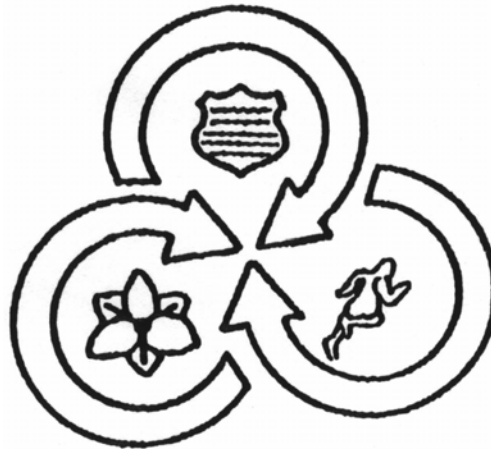


**THE**  
**ONTARIO POLICE**  
**FITNESS AWARD PROGRAM**



Sanctioned by the Policing Services Division of the Ministry of the Solicitor General and Correctional Services and the Ontario Association of Chiefs of Police.

Designed and implemented by the Police Fitness Personnel of Ontario.

This manual replaces all previous printings.

APRIL 2001

## **3.0 FITNESS APPRAISAL GUIDELINES**

### **3.1 QUALIFICATIONS**

An Ontario Police Fitness Award (OPFA) Appraiser must be qualified as a Certified Fitness Consultant (CFC). As an OPFA Appraiser you will need a copy of the most recent Canadian Physical Activity, Fitness and Lifestyle Appraisal (CPAFLA) manual. It is also imperative that OPFA Appraisers maintain accurate appraisal records. The appraiser must be currently certified in cardiopulmonary resuscitation.

### **3.2 MEDICAL CLEARANCE**

#### **Par-Q**

Once you have had a request for an Ontario Police Fitness Award appraisal the participant should fill out the Physical Activity Readiness Questionnaire found in Appendix A. If the participant answers “no” to all questions on the PAR-Q, set up an appointment to conduct the appraisal and give him/her a copy of the pre-test material (Appendix B).

If the participant answers “yes” to one or more questions on the PAR-Q, suggest that he/she visit their physician. Inform the participant that the Ontario Police Fitness Award Medical Consent Form (Appendix C) must be completed by his/her physician before the appraisal can be scheduled.

#### **The Consent Form**

The Consent Form (see Appendix D) should be read, understood and signed prior to the administration of the appraisal. Like the PAR-Q, this form is meant to be self-explanatory. It describes the nature of the appraisal items that will be undertaken and outlines the participant’s responsibilities in the safe administration of the procedures. It is not a waiver form. It must be witnessed at the time of signing. The witness *must not* be the appraiser or anyone involved in the administration of the appraisal.

#### **Resting Heart Rate Measurement**

Participants must sit in a comfortable chair with arm supports and rest with the feet flat on the floor for at least five minutes prior to the resting heart rate being measured. Heart rate may be measured using the stethoscope (placed either on the sternum or the second intercostal space on the left side) or by palpating the radial or carotid artery. Apply gentle pressure. Determine the resting pulse using a 15 second count. In the event the resting heart rate is 100 beats per minute or more, wait an additional five minutes and take the reading again. Participants should not be permitted to do the pin test if their resting heart rate is 100 beats per minute or more. Explain to the participant that the heart rate is not within the range for which the test was designed. Refer them to their physician for follow up.

#### **Resting Blood Pressure Measurement**

Have the participant sit in a chair, resting both feet on the floor and the left arm either on the arm of the chair or a flat surface, such as a table top. Apply the blood pressure cuff to the left arm. Wrap the cuff firmly and smoothly around the left arm with the lower edge of the cuff 2-3 cm above the antecubital space. Position the stethoscope. Quickly inflate the cuff to 185mmHg. Release the valve slowly (2mmHg per second), listening for the first sound (the systolic

pressure) and for when there is no sound at all (the diastolic pressure). Fully deflate the cuff. Record the systolic and diastolic pressure to the nearest two mmHg. In the event that *either* the resting systolic pressure is greater than 144mmHg *or* the diastolic pressure is greater than 94mmHg, wait five minutes, having the participant sit quietly, relaxing, and take the reading again.

**Participants should not be permitted to do the pin test if:**

- (a) *either* reading is above the aforementioned ceilings after two readings.
- (b) the individual is receiving medication for high blood pressure.
- (c) the individual has been told that they have high blood pressure.

If any of the above conditions exist, explain briefly that the blood pressure reading is not within the range for which the test was designed. Refer the participant to their physician for further information on blood pressure.

### **3.3 THE FITNESS APPRAISAL**

In order to maintain standardized results the appraisal must be performed in the same order and within the same time frame on one specified day. The testing procedure is as follows:

- a) Push-ups /20
- b) Trunk Forward Flexion /10
- c) Curl-ups /20
- d) 1.5 Mile Run, modified  
Canadian Aerobic Fitness  
Test, 20-metre Shuttle Run,  
or Astrand Submaximal  
Cycle Test. /50

The results are to be recorded on the Ontario Police Fitness Award Results Sheet (Appendix E). An aggregate score of 75% or higher is required to receive the OPFA pin. The results sheet is returned to the participant.

Complete the Ontario Police Fitness Award Certification Form (Appendix F) and forward to the address indicated on the form. The Ontario Police Fitness Award pin will then be forwarded to the participant through his/her Chief of Police/Commissioner. The presentation of the pin may be done either formally or informally as seen appropriate by the police service.

## 4.0 FITNESS APPRAISAL PROCEDURE AND STANDARDS

### 4.1 PUSH UPS

Push ups are a test of muscular endurance which is defined as the ability of a muscle to perform repeated contractions over a period of time.

#### *Procedure:*

It is imperative that the participant is well instructed in the correct performance of the push-up prior to beginning the test. The push ups are to be performed consecutively and without a time limit. The test is terminated when the participant has completed as many push ups as possible, the form deviates too much from the procedure or there is more than a two second pause between repetitions.

#### *Males:*

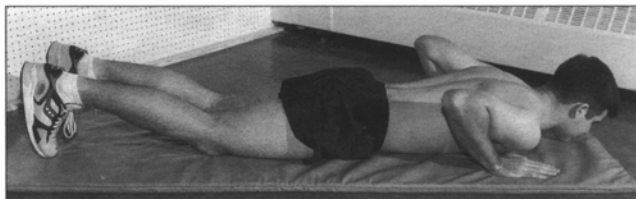
The participant lies on his stomach, legs together. His hands, pointing forward, are positioned under the shoulders. To begin the participant pushes up from the mat by fully straightening the elbows, using the toes as the pivotal point. The upper body must be kept in a straight line. The participant returns to the starting position, chin to the mat. Neither the stomach nor thighs should touch the mat.

#### *Females:*

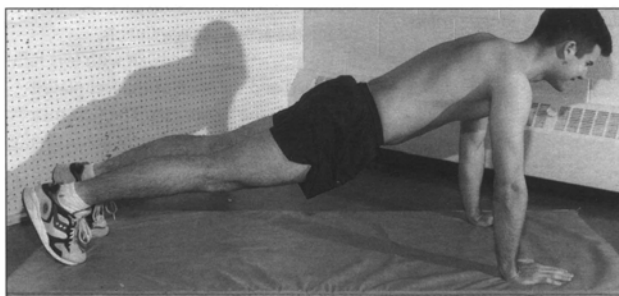
The participant lies on her stomach, legs together. Her hands, pointing forward, are positioned under the shoulders. She then pushes up from the mat by fully straightening the elbows and using the knees as the pivot point. The upper body must be kept in a straight line. The participant returns to the starting position, chin to the mat. The stomach should not touch the mat. The participant **must** have the lower leg remain in contact with the mat, ankles plantar-flexed. The participant may not bend her lower legs up at the knees.

It is not acceptable for either males or females to have their feet against a wall or for a mat to be placed under their chin.

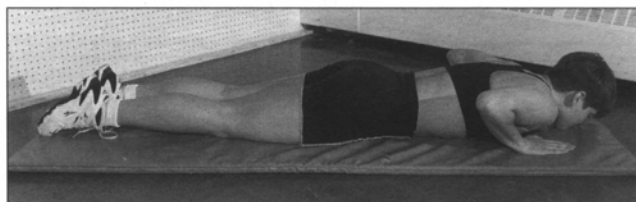
See Tables 1 and 2 for results.



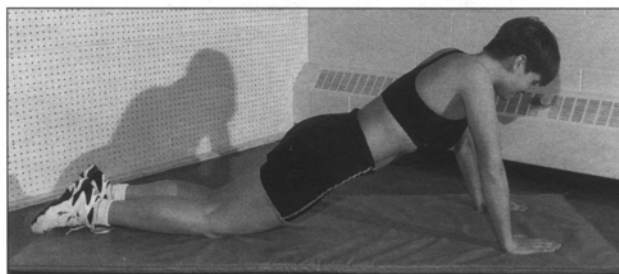
Male Push-Up



Male Push-Up



Female Push-Up



Female Push-Up

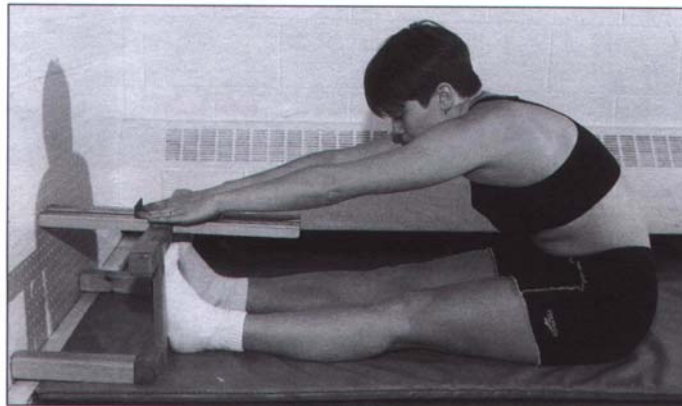
### 4.2 TRUNK FORWARD FLEXION

The trunk forward flexion test measures the flexibility of the hamstring and lower back muscles. Flexibility depends upon the elasticity of the muscles, tendons and ligaments and is the ability to bend without injury (Whitney et al., 1990).

***Procedure:***

Have participants warm up for this test by performing slow stretching movements before taking the actual measurements. Participants, without shoes, sit with legs fully extended and the soles of the feet placed flat against the flexometer. Keeping the knees fully extended, arms evenly stretched, and palms down, participants bend and reach forward (without jerking). The position of maximum flexion must be held for approximately two seconds. Advise the participant that lowering the head will maximize the distance reached. Each participant takes a turn and then the procedure is repeated. Both results are recorded with the higher result scored.

See Table 3 and 4 for results and scores.



### **4.3 CURL-UPS**

Endurance is the ability to sustain an effort for an extended period of time (Whitney et al 1990). The curl-up tests the muscular endurance of the abdominal muscles. The test is terminated if the participant is unable to maintain required cadence, unable to maintain the proper curl- up technique (e.g. heels come off the floor) over two repetitions despite cautions by the appraiser. A maximum of three corrections are allowed by the appraiser before termination of the test.

***Starting Position:***

Participants lie in a supine position with the head resting on the mat, arms straight at sides and parallel to the trunk, palms of hands in contact with the mat, and the middle finger tip of both hands at the 0 mark. Knees are bent at 90 degrees and the heels are kept in contact with the mat. The test is performed with shoes on.

***Procedure:***

Use the cadence provided on a metronome (50 beats per minute). This is followed by a slow curling up of the upper spine far enough so that the middle finger tips of both hands reach the 8 cm or 12 cm mark. During the curl-up the palms and heels must remain in contact with the mat. Anchoring of the feet is not permitted. On return the shoulder blades and head must contact the mat and the finger tips of both hands must touch the 0 mark. The movement is performed in a slow, controlled manner so that the time to perform the lifting and lowering stages of the curl-up is the same at a rate of 25 curl-ups per minute. The curl-ups should be performed at a steady rate, without pausing to a maximum of 75.

The following are some things to ensure during the curl-up test.

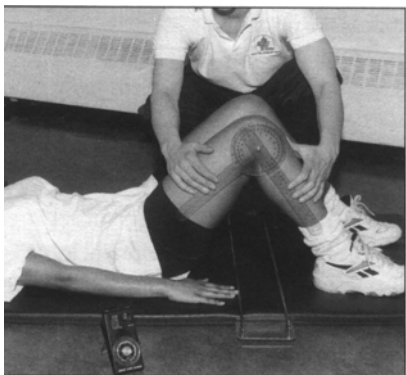
***DO:***

- verify metronome accuracy with a stopwatch (50 beats/minute)
- keep knees at 90 degrees
- keep heels in contact with the mat
- make sure the shoulders are relaxed neither depressed nor elevated
- return to the starting position
- keep arms straight

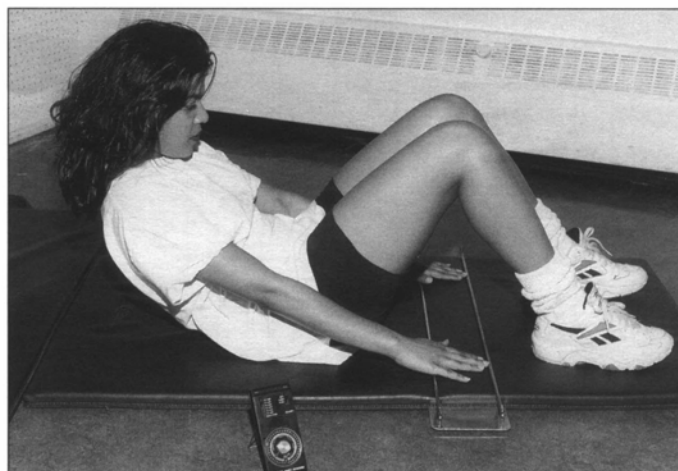
***DON'T:***

- slide the seat from the starting position
- lift or slide the heels
- bend elbows or lose contact between the palms of the hand and the mat
- slide the finger tips past the 12 cm (or 8 cm if 40 yrs or older) mark on the mat
- pause during the movement at top or bottom position
- go ahead or fall behind the correct cadence

See Tables 5 and 6 for results and scores.



*Set-up for Partial Curl-Up*



*Partial Curl-Up*

## 4.4 CARDIOVASCULAR ENDURANCE

The participant is required to take part in one of four options which all accurately measure cardiovascular endurance. The options are as follows: **A.)** 1.5 Mile Run **B)** Modified Canadian Aerobic Fitness Test (mCAFT) **C)** 20-metre Shuttle Run (only those qualified to administer the PREP may use the 20m shuttle run option) or **D)** Astrand Submaximal Cycle Ergometer Test (Certified Fitness Consultants may not use this test - they have not been trained. Only Professional Fitness & Lifestyle Consultants may use this test). The participant may choose which cardiovascular endurance test he/she shall be tested on based on the availability of a qualified appraiser or facilities.

### A) 1.5 MILE RUN

The 1.5 mile run is a test of aerobic fitness or cardiovascular endurance. The 1.5 mile run, therefore, tests the combined efficiency of the lungs, heart, bloodstream and local muscles in getting oxygen to the muscles and putting it to work.

#### **Procedure:**

The participant is required to cover an accurately measured 1.5 mile distance in as short a time as possible.

*See Table 7 and 8 for Results and Scores.*

### ~~B) MODIFIED CANADIAN AEROBIC FITNESS TEST (mCAFT)~~

### ~~C) 20 METRE SHUTTLE RUN (PREP QUALIFIED APPRAISER)~~

### D) ASTRAND SUBMAXIMAL CYCLE ERGOMETER TEST (PFLC QUALIFIED APPRAISER)

(it is suggested that the Monarch Bicycle Ergometer Model 818F be used for this test.)

The Astrand submaximal cycle ergometer test protocol can be a convenient and useful tool in predicting VO<sub>2</sub> max, and monitoring training programs. The cycle ergometer is far less expensive than a treadmill, quiet in operation, less threatening to the client, and facilitates the monitoring of BP, ECG, and HR because the subject is stationary. The skill is easy to master, since most people have experience riding bicycles. Most importantly, this is a submaximal procedure. This kind of test can be employed quite regularly to monitor the effects of exercise programs because it is more “user friendly” than maximal tests. It is especially helpful in testing older adults because of the added control involved and its submaximal nature.

#### **Procedure:**

1. Adjust the seat height so that the leg of the subject is slightly bent when the pedal is at the lowest point.
2. Take the subjects BP.
3. To begin **Stage One**, the subject pedals at a speed of 50rpm or 18km/hr throughout the test, beginning with about 2 minutes of no resistance (to accommodate to the bicycle and the pedaling rate).

4. At **Stage Two**, a power output is assigned (normally 75 to 100 watts for women and 100 to 150 watts for men –power output in  $kpm \times min^{-1} = 50rpm \times resistance \text{ in kg}$ ), for 6 minutes in an attempt to achieve a HR response between 120 and 150bpm. At no time should a subject under age 40 exceed a heart rate of 170bpm, or over the age of 40 exceed a heart rate of 150bpm. In addition, power output may be set lower for very unfit or small individuals. Check the resistance and speed of pedaling constantly to ensure that the power output remains accurate.
5. The BP should be taken at the two minute mark of each stage. Should the diastolic pressure exceed 100 at any time, the test will be terminated immediately.
6. The HR is measured each minute during exercise and the mean of the fifth and sixth minutes is considered the steady-state HR. If these HR differ by more than 5bpm, the exercise load should be prolonged by one more minute to ensure a steady-state.
7. If the HR's response to the second stage workload is below 120bpm, the workload may be increased by 25 watts for women and 50 watts for men.
8. Once a steady state HR has been achieved, and the power outputs assigned elicit HR's between 120 and 170bpm to enable a prediction of  $VO_{2max}$ , the test can be terminated by gradually reducing the resistance over a few seconds and allowing the subject to pedal at a comfortable rate until he/she has recovered. The BP is taken at the completion of the test and at the 2 minute mark of recovery.
9. The HR is used to adjust the workload/power output of each subject appropriately. In some cases, when the subject is very fit, an initial power output will be too low in intensity to yield useful data. For example, a HR of 105bpm after 6 minutes of 100 watts cannot be used to predict  $VO_{2max}$ . If the tester observes this low HR after 2 minutes of exercise (it may be 99bpm at this point), he/she could decide to cut short this power output and increase it to 150 watts. This type of adjustment helps prevent excessive local muscular fatigue which can prematurely terminate a test before adequate data can be gathered. The HR from one power output can be used to help determine the next power output setting.
10. It is very important to remember that this is a sub-maximal test and therefore loses some reliability as an accurate diagnostic tool. It is very user friendly and an excellent counseling tool and is easily used to monitor the progress of a subject.

**Criteria for test termination:**

- Nausea, dizziness, lightheadedness, difficulty breathing, loss of muscle control
- A worrisome appearance, tightness or pain in the chest
- A systolic BP above 250 mm Hg, or a diastolic BP above 100 mm Hg
- A systolic BP that drops below the resting value despite an increase in workload

Should any of these symptoms appear, stop the test immediately and have the subject lie down. Continue monitoring the HR. Should the subject display any of the signs of cardiac distress (pain or feeling pressure in the center of the chest, under the breast bone, shortness of breath), call for medical assistance immediately. HR should return to below 100bpm after 10 minutes.

<b>TERMINATION HEART RATES</b>	
<b>Age</b>	<b>Heart Rate</b>
<20	170 bpm
20-29	165 bpm
30-39	155 bpm
40-49	150 bpm

### ***Limitations of the Method:***

- Astrand warns that sedentary people are often underestimated (likely because the test was developed on a generally active group of subjects), whereas extremely well-trained athletes are often over-estimated.
- Rowell (1964) found that this method underpredicted actual VO<sub>2</sub> max by 27% in a group of sedentary young men before training and by 14% after 3 months of training. **Because of this tendency toward underestimation, some authors have suggested an upward correction factor of about 10% built into the age correction (Cumming, 1975).** For example, the correction factor for 45 years of age would be 0.88 instead of 0.78.

### ***Calculations:***

1. Using this table of Maximal Oxygen Uptake (L/min), determine O<sub>2</sub> uptake in liters per minute (If a 30 yr. Male subject's HR is 150bpm at 900kpm/min, the liters per minute would be 3.2).
2. Multiply the liters per minute by the Age Correction table (ie. 3.2 liters/min x .93 = 2.976 liters/min)
3. Multiply the liters/min by 1000 to get ml/min (ie. 2.976 \* 1000 = 2976 ml/min)
4. Divide the ml/min by the body weight of the subject in kilograms.  
(ie. For a 70kg subject; 2976 ml/min divided by 70kg = 42.514285 ml/kg/min)
5. Round off and apply this number to the scoring charts on table 3. (ie. 42.5 ml/kg/min = 40 points out of 50)

*See Table 12 for Maximal Oxygen Uptakes for Males and Females.*

*See Table 13 for Age Correction Factors for Males and Females.*

*See Table 14 for Results and Scores.*

**TABLE 1  
MALE PUSH-UPS  
RESULTS AND SCORES**

<b>SCORE</b>	<b>AGE 20-29</b>	<b>AGE 30-39</b>	<b>AGE 40-49</b>	<b>AGE 50-59</b>	<b>AGE 60+</b>
20	49+	37+	31+	29+	28+
19	48	36	30	28	25-27
18	36-47	30-35	22-29	21-27	18-24
17	32-35	25-29	20-21	15-20	13-17
16	29-31	22-24	17-19	13-14	12
15	27-28	21	16	12	11
14	25-26	20	15	11	10
12	24	19	13-14	10	9
10	21-23	16-18	12	9	7-8
8	18-20	14-15	10-11	7-8	6
6	16-17	11-13	8-9	5-6	4-5
4	11-15	8-10	5-7	4	2-3
2	10	7	4	3	1

**TABLE 2  
FEMALE PUSH-UPS  
RESULTS AND SCORES**

<b>SCORE</b>	<b>AGE 20-29</b>	<b>AGE 30-39</b>	<b>AGE 40-49</b>	<b>AGE 50-59</b>	<b>AGE 60+</b>
<b>20</b>	<b>38+</b>	<b>37+</b>	<b>33+</b>	<b>31+</b>	<b>31+</b>
<b>19</b>	<b>37</b>	<b>36</b>	<b>32</b>	<b>30</b>	<b>30</b>
<b>18</b>	<b>30-36</b>	<b>27-35</b>	<b>24-31</b>	<b>21-29</b>	<b>17-29</b>
<b>17</b>	<b>24-29</b>	<b>22-26</b>	<b>20-23</b>	<b>15-20</b>	<b>13-16</b>
<b>16</b>	<b>21-23</b>	<b>20-21</b>	<b>15-19</b>	<b>12-14</b>	<b>12</b>
<b>15</b>	<b>20</b>	<b>17-19</b>	<b>14</b>	<b>11</b>	<b>10-11</b>
<b>14</b>	<b>18-19</b>	<b>16</b>	<b>13</b>	<b>10</b>	<b>9</b>
<b>12</b>	<b>16-17</b>	<b>14-15</b>	<b>12</b>	<b>9</b>	<b>6-8</b>
<b>10</b>	<b>14-15</b>	<b>12-13</b>	<b>10-11</b>	<b>5-8</b>	<b>4-5</b>
<b>8</b>	<b>11-13</b>	<b>10-11</b>	<b>7-9</b>	<b>3-4</b>	<b>2-3</b>
<b>6</b>	<b>9-10</b>	<b>7-9</b>	<b>4-6</b>	<b>1-2</b>	<b>1</b>
<b>4</b>	<b>5-8</b>	<b>4-6</b>	<b>2-3</b>	---	---
<b>2</b>	<b>4</b>	<b>3</b>	<b>1</b>	---	---

**TABLE 3  
MALE TRUNK FORWARD FLEXION  
RESULTS AND SCORES**

<b>SCORE</b>	<b>AGE 20-29</b>	<b>AGE 30-39</b>	<b>AGE 40-49</b>	<b>AGE 50-59</b>	<b>AGE 60+</b>
<b>10</b>	<b>45+</b>	<b>44+</b>	<b>41+</b>	<b>42+</b>	<b>45+</b>
<b>9.5</b>	<b>44</b>	<b>43</b>	<b>40</b>	<b>41</b>	<b>44</b>
<b>9</b>	<b>40-43</b>	<b>38-42</b>	<b>35-39</b>	<b>35-40</b>	<b>33-43</b>
<b>8.5</b>	<b>37-39</b>	<b>35-37</b>	<b>32-34</b>	<b>30-34</b>	<b>28-32</b>
<b>8</b>	<b>34-36</b>	<b>33-34</b>	<b>29-31</b>	<b>28-29</b>	<b>25-27</b>
<b>7.5</b>	<b>33</b>	<b>32</b>	<b>28</b>	<b>27</b>	<b>24</b>
<b>7</b>	<b>32</b>	<b>31</b>	<b>26-27</b>	<b>26</b>	<b>23</b>
<b>6</b>	<b>31</b>	<b>29-30</b>	<b>25</b>	<b>25</b>	<b>22</b>
<b>5</b>	<b>29-30</b>	<b>27-28</b>	<b>23-24</b>	<b>22-24</b>	<b>18-21</b>
<b>4</b>	<b>26-28</b>	<b>24-26</b>	<b>20-22</b>	<b>18-21</b>	<b>16-17</b>
<b>3</b>	<b>23-25</b>	<b>21-23</b>	<b>16-19</b>	<b>15-17</b>	<b>14-15</b>
<b>2</b>	<b>18-22</b>	<b>17-20</b>	<b>12-15</b>	<b>12-14</b>	<b>11-13</b>
<b>1</b>	<b>17</b>	<b>16</b>	<b>11</b>	<b>11</b>	<b>10</b>

**TABLE 4  
FEMALE TRUNK FORWARD FLEXION  
RESULTS AND SCORES**

<b>SCORE</b>	<b>AGE 20-29</b>	<b>AGE 30-39</b>	<b>AGE 40-49</b>	<b>AGE 50-59</b>	<b>AGE 60+</b>
<b>10</b>	<b>46+</b>	<b>46+</b>	<b>44+</b>	<b>44+</b>	<b>41+</b>
<b>9.5</b>	<b>45</b>	<b>45</b>	<b>43</b>	<b>43</b>	<b>40</b>
<b>9</b>	<b>41-44</b>	<b>41-44</b>	<b>38-42</b>	<b>39-42</b>	<b>35-39</b>
<b>8.5</b>	<b>39-40</b>	<b>38-40</b>	<b>36-37</b>	<b>36-38</b>	<b>33-34</b>
<b>8</b>	<b>37-38</b>	<b>36-37</b>	<b>34-35</b>	<b>33-35</b>	<b>31-32</b>
<b>7.5</b>	<b>36</b>	<b>35</b>	<b>33</b>	<b>32</b>	<b>30</b>
<b>7</b>	<b>35</b>	<b>34</b>	<b>32</b>	<b>31</b>	<b>29</b>
<b>6</b>	<b>34</b>	<b>33</b>	<b>31</b>	<b>30</b>	<b>28</b>
<b>5</b>	<b>32-33</b>	<b>31-32</b>	<b>29-30</b>	<b>29</b>	<b>26-27</b>
<b>4</b>	<b>29-31</b>	<b>28-30</b>	<b>26-28</b>	<b>26-28</b>	<b>24-25</b>
<b>3</b>	<b>26-28</b>	<b>25-27</b>	<b>24-25</b>	<b>23-25</b>	<b>23</b>
<b>2</b>	<b>22-25</b>	<b>21-24</b>	<b>19-23</b>	<b>19-22</b>	<b>18-22</b>
<b>1</b>	<b>21</b>	<b>20</b>	<b>18</b>	<b>18</b>	<b>17</b>

**TABLE 5  
MALE CURL-UPS  
RESULTS AND SCORES**

<b>DISTANCE</b>	<b>12 cm</b>	<b>12 cm</b>	<b>8 cm</b>	<b>8 cm</b>	<b>8 cm</b>
<b>SCORE</b>	<b>AGE 20-29</b>	<b>AGE 30-39</b>	<b>AGE 40-49</b>	<b>AGE 50-59</b>	<b>AGE 60+</b>
<b>20</b>	<b>67-75</b>	<b>72-75</b>	<b>75</b>	<b>67-74</b>	<b>42-53</b>
<b>19</b>	<b>54-66</b>	<b>66-71</b>	<b>74</b>	<b>58-66</b>	<b>33-41</b>
<b>18</b>	<b>45-53</b>	<b>52-65</b>	<b>70-73</b>	<b>49-57</b>	<b>28-32</b>
<b>17</b>	<b>38-44</b>	<b>43-51</b>	<b>62-69</b>	<b>42-48</b>	<b>24-27</b>
<b>16</b>	<b>32-37</b>	<b>37-42</b>	<b>52-61</b>	<b>36-41</b>	<b>20-23</b>
<b>15</b>	<b>31</b>	<b>35-36</b>	<b>48-51</b>	<b>33-35</b>	<b>19</b>
<b>14</b>	<b>28-30</b>	<b>32-34</b>	<b>40-47</b>	<b>28-32</b>	<b>17-18</b>
<b>12</b>	<b>25-27</b>	<b>27-31</b>	<b>32-39</b>	<b>24-27</b>	<b>10-16</b>
<b>10</b>	<b>21-24</b>	<b>20-26</b>	<b>27-31</b>	<b>20-23</b>	<b>7-9</b>
<b>8</b>	<b>14-20</b>	<b>14-19</b>	<b>22-26</b>	<b>14-19</b>	<b>4-6</b>
<b>6</b>	<b>5-13</b>	<b>3-13</b>	<b>14-21</b>	<b>3-13</b>	<b>3</b>
<b>4</b>	<b>4</b>	<b>2</b>	<b>13</b>	<b>2</b>	<b>2</b>
<b>2</b>	<b>3</b>	<b>1</b>	<b>12</b>	<b>1</b>	<b>1</b>

**TABLE 6  
FEMALE CURL-UPS  
RESULTS AND SCORES**

<b>DISTANCE</b>	<b>12 cm</b>	<b>12 cm</b>	<b>8 cm</b>	<b>8 cm</b>	<b>8 cm</b>
<b>SCORE</b>	<b>AGE 20-29</b>	<b>AGE 30-39</b>	<b>AGE 40-49</b>	<b>AGE 50-59</b>	<b>AGE 60+</b>
<b>20</b>	<b>56-70</b>	<b>49-55</b>	<b>46-50</b>	<b>38-48</b>	<b>39-50</b>
<b>19</b>	<b>44-55</b>	<b>42-48</b>	<b>41-45</b>	<b>30-37</b>	<b>30-38</b>
<b>18</b>	<b>40-43</b>	<b>37-41</b>	<b>36-40</b>	<b>25-29</b>	<b>26-29</b>
<b>17</b>	<b>36-39</b>	<b>33-36</b>	<b>32-35</b>	<b>21-24</b>	<b>23-25</b>
<b>16</b>	<b>33-35</b>	<b>29-32</b>	<b>29-31</b>	<b>17-20</b>	<b>20-22</b>
<b>15</b>	<b>31-32</b>	<b>27-28</b>	<b>28</b>	<b>15-16</b>	<b>18-19</b>
<b>14</b>	<b>28-30</b>	<b>22-26</b>	<b>26-27</b>	<b>10-14</b>	<b>14-17</b>
<b>12</b>	<b>22-27</b>	<b>17-21</b>	<b>21-25</b>	<b>6-9</b>	<b>10-13</b>
<b>10</b>	<b>18-21</b>	<b>13-16</b>	<b>15-20</b>	<b>5</b>	<b>5-9</b>
<b>8</b>	<b>13-17</b>	<b>4-12</b>	<b>6-14</b>	<b>4</b>	<b>4</b>
<b>6</b>	<b>6-12</b>	<b>3</b>	<b>3-5</b>	<b>3</b>	<b>3</b>
<b>4</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>2</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

**TABLE 7  
1.5 MILE RUN – MALES  
RESULTS AND SCORES**

<b>SCORE</b>	<b>AGE 20-29</b>	<b>AGE 30-34</b>	<b>AGE 35-39</b>	<b>AGE 40-49</b>	<b>AGE 50+</b>
<b>50</b>	<b>&lt; 9:00</b>	<b>&lt; 9:20</b>	<b>&lt; 10:06</b>	<b>&lt; 10:54</b>	<b>&lt; 11:59</b>
<b>47.5</b>	<b>9:01-9:30</b>	<b>9:21-9:50</b>	<b>10:07-10:37</b>	<b>10:55-11:41</b>	<b>12:00-12:51</b>
<b>45</b>	<b>9:31-10:00</b>	<b>9:51-10:20</b>	<b>10:38-11:10</b>	<b>11:42-12:17</b>	<b>12:52-13:31</b>
<b>42.5</b>	<b>10:01-10:30</b>	<b>10:21-10:50</b>	<b>11:11-11:42</b>	<b>12:18-12:52</b>	<b>13:32-14:07</b>
<b>40</b>	<b>10:31-10:56</b>	<b>10:51-11:20</b>	<b>11:43-12:14</b>	<b>12:53-13:28</b>	<b>14:08-14:49</b>
<b>37.5</b>	<b>10:57-11:22</b>	<b>11:21-11:50</b>	<b>12:15-12:47</b>	<b>13:29-14:04</b>	<b>14:50-15:28</b>
<b>35</b>	<b>11:23-11:46</b>	<b>11:51-12:20</b>	<b>12:48-13:19</b>	<b>14:05-14:39</b>	<b>15:29-16:07</b>
<b>30</b>	<b>11:47-12:10</b>	<b>12:21-12:50</b>	<b>13:20-13:52</b>	<b>14:40-15:15</b>	<b>16:08-16:47</b>
<b>25</b>	<b>12:11-12:35</b>	<b>12:51-13:20</b>	<b>13:53-14:24</b>	<b>15:16-15:50</b>	<b>16:48-17:25</b>
<b>20</b>	<b>12:36-12:59</b>	<b>13:21-13:50</b>	<b>14:25-14:56</b>	<b>15:51-16:26</b>	<b>17:26-18:05</b>
<b>15</b>	<b>13:00-13:30</b>	<b>13:51-14:20</b>	<b>14:57-15:29</b>	<b>16:27-17:02</b>	<b>18:06-18:44</b>
<b>10</b>	<b>13:31-14:00</b>	<b>14:21-14:50</b>	<b>15:30-16:01</b>	<b>17:03-17:37</b>	<b>18:45-19:23</b>
<b>5</b>	<b>14:01-14:30</b>	<b>14:51-15:20</b>	<b>16:02-16:34</b>	<b>17:38-18:13</b>	<b>19:24-20:02</b>

**TABLE 8  
1.5 MILE RUN – FEMALES  
RESULTS AND SCORES**

<b>SCORE</b>	<b>AGE 20-29</b>	<b>AGE 30-34</b>	<b>AGE 35-39</b>	<b>AGE 40-49</b>	<b>AGE 50+</b>
50	< 10:35	< 11:00	< 11:53	< 13:04	< 14:22
47.5	10:36-11:10	11:01-11:35	11:54-12:31	13:05-13:46	14:23-15:08
45	11:11-11:52	11:36-12:10	12:32-13:08	13:47-14:27	15:09-15:53
42.5	11:53-12:34	12:11-12:45	13:09-13:46	14:28-15:08	15:54-16:38
40	12:35-13:00	12:46-13:20	13:47-14:24	15:09-15:50	16:39-17:25
37.5	13:01-13:26	13:21-13:55	14:25-15:02	15:51-16:32	17:26-18:11
35	13:27-13:42	13:56-14:30	15:03-15:40	16:33-17:14	18:12-18:57
30	13:43-13:57	14:31-15:05	15:41-16:17	17:15-17:55	18:58-19:42
25	13:58-14:12	15:06-15:40	16:18-16:55	17:56-18:21	19:43-20:11
20	14:13-14:27	15:41-16:15	16:56-17:33	18:22-19:18	20:12-21:14
15	14:28-14:42	16:16-16:50	17:34-18:11	19:19-20:06	21:15-22:00
10	14:43-14:57	16:51-17:25	18:12-18:49	20:07-20:41	22:01-22:45
5	14:58-15:12	17:26-18:00	18:50-19:26	20:42-21:22	22:46-23:30