

Arizona Peace Officer Standards and Training

Basic Curriculum Lesson Plan

LESSON TITLE: PHYSICAL FITNESS - SECTION 4 ADDENDUM A

Medical History Questionnaire / PAR-Q (Physical Activity Readiness Questionnaire)

Purpose

To determine the risk of exercise and clear the participant for level 3 assessment (test battery)

Equipment

Medical history questionnaire

Procedures

- Select a private area for the questionnaire
- This is not use to diagnose only to determine risk
- Consult with agency rules and procedure on managing the information

Dialogue

The medical history questionnaire will determine any risk for exercise and clear you for the level 3 assessment – the test battery. Fully answer the questionnaire; your answers will not be shared or made available to unauthorized persons.

Physical Activity Readiness Questionnaire – PAR-Q

For most people physical activity should not pose any problem or hazard. The Par-Q has been designed to identify the small number of adults for whom physical activity might be inappropriate or those who should have medical advice concerning the type of activity most suitable for them.

Common sense is your best guide in answering these questions. Please read them carefully and check **YES** or **NO** opposite the question if it applies to you. If a question is answered with **YES**, *please use the available space to explain your answer and give additional details.*

1. Has a doctor ever said that you have a heart condition and that you should only do physical activity recommended by a doctor? **YES** **NO**
2. Do you feel pain in your chest when you do physical activity? **YES** **NO**
3. In the past month, have you had chest pain when you were not doing physical activity? **YES** **NO**
4. Do you lose your balance because of dizziness or do you ever lose consciousness? **YES** **NO**
5. Do you have a bone or joint problem that could be made worse by a change in your physical activity? **YES** **NO**
6. Is your doctor currently prescribing drugs (for example, water pills) for your blood pressure or heart condition? **YES** **NO**
7. Do you know of any other reason why you should not do physical activity? **YES** **NO**
8. Do you currently participate in any regular activity program designed to improve or maintain your physical fitness. **YES** **NO**

If yes, what activity program do you participate in? _____

Resting Blood Pressure

Purpose

Measures the force against the arterial wall during the contraction and relaxation of the heart.

Equipment

Sphygmomanometer and stethoscope
Or a digital blood pressure cuff

Procedures

- Level 1 Screening
- Subject should be free from stimuli (caffeine, nicotine, exercise)
- Have subject sit quietly for a few minutes, feet flat on the floor, arm at heart level
- Place BP cuff 2.5 cm above antecubital space; centered on the brachial artery
- Ensure that stethoscope is turned on and place on brachial artery
- Tighten screw on bulb and pump to 180 mm Hg
- Slowly deflate cuff (2-3 mm Hg/sec)
- First beat heard is systolic, last beat heard is diastolic
- Subject should not move or talk during measurement

Dialogue

Prior to conducting a level 3 assessment (the test battery), we will measure the blood pressure to determine any risks for heart disease. You should be free from stimuli such as caffeine, nicotine, and exertion. Have a seat and place your arm (left or right) on the table at heart level. Keep both feet flat on the floor and sit quietly; please do not talk during the measurement.

Note: if the measurement is over 140/90; have the participant rest for 15 minutes and measure again. If the reading is still high, refer to the medical questionnaire. The subject should not proceed to the level 3 assessment without clearance from a medical professional if risks and/or contraindications are evident.

Blood Pressure and Body Fat Collection Sheet

Name: _____

Blood Pressure (minimum of 10 readings)

Name of Student	Reading

Body Fat (minimum of 10 readings)

Name	Age	Site 1	Site 2	Site 3	Total	percentile

Resting Heart Rate

Purpose

Used to determine a target heart rate range for aerobic activity

Equipment

Stopwatch or clock with a sweeping second hand

Procedures

- Level 1 screening; should be administered prior to the field assessment
- Find the pulse either at radial artery on the wrist or carotid on the neck
- Use two fingers to feel pulse, do not use the thumb
- Take a full 60 second count; start at zero
- Best to take early morning before exercise/activity/caffeine
- Record the heart rate on the fitness profile

Dialogue

The resting heart rate will help us determine a target heart rate range for training. It is also an indicator of how hard our heart is working. We will count the number of beats for 60 seconds. You can find your pulse at two common sites: the carotid artery at the neck or the radial artery on your wrist. Use two fingers, with a light touch; do not use your thumb as it has a pulse of its own. To find the pulse on your neck, lightly press two fingers on either side of your Adam's apple. To find the pulse on your wrist, place two fingers lightly on the thumb side of your inner wrist. I will tell you "start" and you will count your pulse for 60 seconds beginning with "zero". You may want to close your eyes as this will eliminate stimulus as you are counting. After determining your resting heart rate, record this number on your fitness profile.

3-minute Step Test

Purpose

Measures heart rate recovery.

Equipment

12 inch bench or step
Stop watch
Metronome set at 94 beats per minute

Procedures

- Level 2 screening
- Use a 12" bench or platform
- Set metronome to 96 beats per minute or use audio clip
- Subject steps up and down for 24 cycles (up, up, down, down) a minute for 3 minutes
- Immediately after 3 minutes have subject sit down
- Within 5 seconds find pulse; take heart rate for 60 seconds
- Consult norms – do not proceed to level 3 testing if subject measures very poor or fails to complete step test
- Test is invalid for subjects on beta blockers or other medications affecting heart rate

Dialogue (can also be played from 3 minute step test audio clip)

The three minute step test measures your heart rate recovery. You will step up and down on the bench (or step) at a cadence of 94 beats per minute. The proper cadence begins with up, up, down, down and so forth. The audio clip will maintain the cadence for 3 minutes. Upon completing the 3 minutes, immediately sit down and find your pulse within 5 seconds. You will count the number of heart beats for 60 seconds. You should find your pulse rapid in the beginning; eventually slowing down. If you cannot complete the test, or you begin to feel fatigue or light-headed, stop immediately. Do you have any questions?

Males		Females	
Excellent	< 71	Excellent	<97
Good	71-102	Good	97-127
Fair	103-117	Fair	128-142
Poor	118-147	Poor	143-171
Very poor	148+	Very poor	172+

Source: Cooper Fitness Specialist Manual,

Body Composition

Purpose

To measure body fat versus lean muscle mass.

Equipment

Skinfold calipers

Procedures

- Level 1 screening
- Estimate of body fat (margin of error 3-4%)
- Use the right side of the body
- Pinch from top; measure from bottom
- Calipers perpendicular to body
- Males measure males; females measure females
- Male sites:
 - Chest* - diagonal fold on the lateral border of pec muscle between the shoulder crease and nipple
 - Abdomen* - vertical fold adjacent to the umbilicus
 - Thigh* - vertical fold at the middle and front; halfway between the greater trochanter and the patella
- Female sites:
 - Triceps* – vertical fold over the belly of muscle halfway between the acromion and the olecranon process
 - Suprailiac* – diagonal fold just above the iliac crest; slightly anterior to the middle of the side
 - Thigh* – same as the male site
- Measure until two numbers match

Dialogue

This method of assessment determines body composition by estimating percent body fat through measuring skinfold thickness. Good body composition facilitates efficient movement, reduces chances for injury, and helps officers present a positive image.

Your body composition will be measured using skinfold calipers. I will measure 3 sites and determine your body fat percentage. Once we've determined your body fat percentage versus lean muscle mass, you can establish goals to lose fat and gain muscle. A proper diet and training program will assist you in reaching that goal. Skinfold calipers have a margin of error of 3-4%. It is highly suggested you have yourself measured by the same instructor after 6-8 weeks of a training program.

