

PARmed-X PHYSICAL ACTIVITY READINESS MEDICAL EXAMINATION

The PARmed-X is a physical activity-specific checklist to be used by a physician with patients who have had positive responses to the Physical Activity Readiness Questionnaire (PAR-Q). In addition, the Conveyance/Referral Form in the PARmed-X can be used to convey clearance for physical activity participation, or to make a referral to a medically-supervised exercise program.

Regular physical activity is fun and healthy, and increasingly more people are starting to become more active every day. Being more active is very safe for most people. The PAR-Q by itself provides adequate screening for the majority of people. However, some individuals may require a medical evaluation and specific advice (exercise prescription) due to one or more positive responses to the PAR-Q.

Following the participant's evaluation by a physician, a physical activity plan should be devised in consultation with a physical activity professional (CSEP-Professional Fitness & Lifestyle Consultant or CSEP-Exercise Therapist™). To assist in this, the following instructions are provided:

- PAGE 1:** • Sections A, B, C, and D should be completed by the participant BEFORE the examination by the physician. The bottom section is to be completed by the examining physician.
- PAGES 2 & 3:** • A checklist of medical conditions requiring special consideration and management.
- PAGE 4:** • Physical Activity & Lifestyle Advice for people who do not require specific instructions or prescribed exercise.
• Physical Activity Readiness Conveyance/Referral Form - an optional tear-off tab for the physician to convey clearance for physical activity participation, or to make a referral to a medically-supervised exercise program.

This section to be completed by the participant	
<p>A PERSONAL INFORMATION:</p> <p>NAME _____</p> <p>ADDRESS _____</p> <p>TELEPHONE _____</p> <p>BIRTHDATE _____ GENDER _____</p> <p>MEDICAL No. _____</p>	<p>B PAR-Q: Please indicate the PAR-Q questions to which you answered YES</p> <ul style="list-style-type: none"> <input type="checkbox"/> Q 1 Heart condition <input type="checkbox"/> Q 2 Chest pain during activity <input type="checkbox"/> Q 3 Chest pain at rest <input type="checkbox"/> Q 4 Loss of balance, dizziness <input type="checkbox"/> Q 5 Bone or joint problem <input type="checkbox"/> Q 6 Blood pressure or heart drugs <input type="checkbox"/> Q 7 Other reason: _____
<p>C RISK FACTORS FOR CARDIOVASCULAR DISEASE: <i>Check all that apply</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Less than 30 minutes of moderate physical activity most days of the week. <input type="checkbox"/> Excessive accumulation of fat around waist. <input type="checkbox"/> Currently smoker (tobacco smoking 1 or more times per week). <input type="checkbox"/> Family history of heart disease. <input type="checkbox"/> High blood pressure reported by physician after repeated measurements. <input type="checkbox"/> High cholesterol level reported by physician. <div style="border: 1px solid red; padding: 5px; margin-top: 10px;"> <p>Please note: Many of these risk factors are modifiable. Please refer to page 4 and discuss with your physician.</p> </div>	<p>D PHYSICAL ACTIVITY INTENTIONS:</p> <p>What physical activity do you intend to do?</p> <p>_____</p> <p>_____</p> <p>_____</p>

This section to be completed by the examining physician									
<p>Physical Exam:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Ht</td> <td style="width: 15%;">Wt</td> <td style="width: 15%;">BP i) /</td> <td style="width: 15%;"></td> </tr> <tr> <td></td> <td></td> <td>BP ii) /</td> <td></td> </tr> </table> <p>Conditions limiting physical activity:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Cardiovascular <input type="checkbox"/> Respiratory <input type="checkbox"/> Other <input type="checkbox"/> Musculoskeletal <input type="checkbox"/> Abdominal <p>Tests required:</p> <ul style="list-style-type: none"> <input type="checkbox"/> ECG <input type="checkbox"/> Exercise Test <input type="checkbox"/> X-Ray <input type="checkbox"/> Blood <input type="checkbox"/> Urinalysis <input type="checkbox"/> Other 	Ht	Wt	BP i) /				BP ii) /		<p>Physical Activity Readiness Conveyance/Referral:</p> <p>Based upon a current review of health status, I recommend:</p> <div style="border: 1px solid black; padding: 5px; float: right; margin-top: 10px;"> <p>Further Information:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Attached <input type="checkbox"/> To be forwarded <input type="checkbox"/> Available on request </div> <ul style="list-style-type: none"> <input type="checkbox"/> No physical activity <input type="checkbox"/> Only a medically-supervised exercise program until further medical clearance <input type="checkbox"/> Progressive physical activity: <ul style="list-style-type: none"> <input type="checkbox"/> with avoidance of: _____ <input type="checkbox"/> with inclusion of: _____ <input type="checkbox"/> under the supervision of a CSEP-Professional Fitness & Lifestyle Consultant or CSEP-Exercise Therapist™ <input type="checkbox"/> Unrestricted physical activity—start slowly and build up gradually
Ht	Wt	BP i) /							
		BP ii) /							

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Following is a checklist of medical conditions for which a degree of precaution and/or special advice should be considered for those who answered "YES" to one or more questions on the PAR-Q, and people over the age of 69. Conditions are grouped by system. Three categories of precautions are provided. Comments under Advice are general, since details and alternatives require clinical judgement in each individual instance.

	Absolute Contraindications	Relative Contraindications	Special Prescriptive Conditions	ADVICE
	Permanent restriction or temporary restriction until condition is treated, stable, and/or past acute phase.	Highly variable. Value of exercise testing and/or program may exceed risk. Activity may be restricted. Desirable to maximize control of condition. Direct or indirect medical supervision of exercise program may be desirable.	Individualized prescriptive advice generally appropriate: • limitations imposed; and/or • special exercises prescribed. May require medical monitoring and/or initial supervision in exercise program.	
Cardiovascular	<input type="checkbox"/> aortic aneurysm (dissecting) <input type="checkbox"/> aortic stenosis (severe) <input type="checkbox"/> congestive heart failure <input type="checkbox"/> crescendo angina <input type="checkbox"/> myocardial infarction (acute) <input type="checkbox"/> myocarditis (active or recent) <input type="checkbox"/> pulmonary or systemic embolism—acute <input type="checkbox"/> thrombophlebitis <input type="checkbox"/> ventricular tachycardia and other dangerous dysrhythmias (e.g., multi-focal ventricular activity)	<input type="checkbox"/> aortic stenosis (moderate) <input type="checkbox"/> subaortic stenosis (severe) <input type="checkbox"/> marked cardiac enlargement <input type="checkbox"/> supraventricular dysrhythmias (uncontrolled or high rate) <input type="checkbox"/> ventricular ectopic activity (repetitive or frequent) <input type="checkbox"/> ventricular aneurysm <input type="checkbox"/> hypertension—untreated or uncontrolled severe (systemic or pulmonary) <input type="checkbox"/> hypertrophic cardiomyopathy <input type="checkbox"/> compensated congestive heart failure	<input type="checkbox"/> aortic (or pulmonary) stenosis—mild angina pectoris and other manifestations of coronary insufficiency (e.g., post-acute infarct) <input type="checkbox"/> cyanotic heart disease <input type="checkbox"/> shunts (intermittent or fixed) <input type="checkbox"/> conduction disturbances • complete AV block • left BBB • Wolff-Parkinson-White syndrome <input type="checkbox"/> dysrhythmias—controlled <input type="checkbox"/> fixed rate pacemakers <input type="checkbox"/> intermittent claudication <input type="checkbox"/> hypertension: systolic 160-180; diastolic 105+	<ul style="list-style-type: none"> • clinical exercise test may be warranted in selected cases, for specific determination of functional capacity and limitations and precautions (if any). • slow progression of exercise to levels based on test performance and individual tolerance. • consider individual need for initial conditioning program under medical supervision (indirect or direct).
			<input type="checkbox"/> hypertension: systolic 160-180; diastolic 105+	progressive exercise to tolerance
			<input type="checkbox"/> chronic infections <input type="checkbox"/> HIV	variable as to condition
Infections	<input type="checkbox"/> acute infectious disease (regardless of etiology)	<input type="checkbox"/> subacute/chronic/recurrent infectious diseases (e.g., malaria, others)		
		<input type="checkbox"/> uncontrolled metabolic disorders (diabetes mellitus, thyrotoxicosis, myxedema)	<input type="checkbox"/> renal, hepatic & other metabolic insufficiency	variable as to status
Metabolic			<input type="checkbox"/> obesity <input type="checkbox"/> single kidney	dietary moderation, and initial light exercises with slow progression (walking, swimming, cycling)
		<input type="checkbox"/> complicated pregnancy (e.g., toxemia, hemorrhage, incompetent cervix, etc.)	<input type="checkbox"/> advanced pregnancy (late 3rd trimester)	refer to the "PARmed-X for PREGNANCY"
Pregnancy				

References:

Arraix, G.A., Wigle, D.T., Mao, Y. (1992). Risk Assessment of Physical Activity and Physical Fitness in the Canada Health Survey Follow-Up Study. *J. Clin. Epidemiol.* 45:4 419-428.

Mottola, M., Wolfe, L.A. (1994). Active Living and Pregnancy, In: A. Quinney, L. Gauvin, T. Wall (eds.), **Toward Active Living: Proceedings of the International Conference on Physical Activity, Fitness and Health.** Champaign, IL: Human Kinetics.

PAR-Q Validation Report, British Columbia Ministry of Health, 1978.

Thomas, S., Reading, J., Shephard, R.J. (1992). Revision of the Physical Activity Readiness Questionnaire (PAR-Q). *Can. J. Spt. Sci.* 17: 4 338-345.

The PAR-Q and PARmed-X were developed by the British Columbia Ministry of Health. They have been revised by an Expert Advisory Committee of the Canadian Society for Exercise Physiology chaired by Dr. N. Gledhill (2002).

No changes permitted. You are encouraged to photocopy the PARmed-X, but only if you use the entire form.

Disponible en français sous le titre
«Évaluation médicale de l'aptitude à l'activité physique (X-AAP)»

Continued on page 3...

	Special Prescriptive Conditions	ADVICE
Lung	<input type="checkbox"/> chronic pulmonary disorders	special relaxation and breathing exercises
	<input type="checkbox"/> obstructive lung disease <input type="checkbox"/> asthma	breath control during endurance exercises to tolerance; avoid polluted air
	<input type="checkbox"/> exercise-induced bronchospasm	avoid hyperventilation during exercise; avoid extremely cold conditions; warm up adequately; utilize appropriate medication.
Musculoskeletal	<input type="checkbox"/> low back conditions (pathological, functional)	avoid or minimize exercise that precipitates or exasperates e.g., forced extreme flexion, extension, and violent twisting; correct posture, proper back exercises
	<input type="checkbox"/> arthritis—acute (infective, rheumatoid; gout)	treatment, plus judicious blend of rest, splinting and gentle movement
	<input type="checkbox"/> arthritis—subacute	progressive increase of active exercise therapy
	<input type="checkbox"/> arthritis—chronic (osteoarthritis and above conditions)	maintenance of mobility and strength; non-weightbearing exercises to minimize joint trauma (e.g., cycling, aquatic activity, etc.)
	<input type="checkbox"/> orthopaedic	highly variable and individualized
	<input type="checkbox"/> hernia	minimize straining and isometrics; strengthen abdominal muscles
	<input type="checkbox"/> osteoporosis or low bone density	avoid exercise with high risk for fracture such as push-ups, curl-ups, vertical jump and trunk forward flexion; engage in low-impact weight-bearing activities and resistance training
CNS	<input type="checkbox"/> convulsive disorder not completely controlled by medication	minimize or avoid exercise in hazardous environments and/or exercising alone (e.g., swimming, mountaineering, etc.)
	<input type="checkbox"/> recent concussion	thorough examination if history of two concussions; review for discontinuation of contact sport if three concussions, depending on duration of unconsciousness, retrograde amnesia, persistent headaches, and other objective evidence of cerebral damage
Blood	<input type="checkbox"/> anemia—severe (< 10 Gm/dl)	control preferred; exercise as tolerated
	<input type="checkbox"/> electrolyte disturbances	
Medications	<input type="checkbox"/> antianginal <input type="checkbox"/> antiarrhythmic <input type="checkbox"/> antihypertensive <input type="checkbox"/> anticonvulsant <input type="checkbox"/> beta-blockers <input type="checkbox"/> digitalis preparations <input type="checkbox"/> diuretics <input type="checkbox"/> ganglionic blockers <input type="checkbox"/> others	NOTE: consider underlying condition. Potential for: exertional syncope, electrolyte imbalance, bradycardia, dysrhythmias, impaired coordination and reaction time, heat intolerance. May alter resting and exercise ECG's and exercise test performance.
Other	<input type="checkbox"/> post-exercise syncope	moderate program
	<input type="checkbox"/> heat intolerance	prolong cool-down with light activities; avoid exercise in extreme heat
	<input type="checkbox"/> temporary minor illness	postpone until recovered
	<input type="checkbox"/> cancer	if potential metastases, test by cycle ergometry, consider non-weight bearing exercises; exercise at lower end of prescriptive range (40-65% of heart rate reserve), depending on condition and recent treatment (radiation, chemotherapy); monitor hemoglobin and lymphocyte counts; add dynamic lifting exercise to strengthen muscles, using machines rather than weights.

*Refer to special publications for elaboration as required

The following companion forms are available online: <http://www.csep.ca/forms.asp>

The **Physical Activity Readiness Questionnaire (PAR-Q)** - a questionnaire for people aged 15-69 to complete before becoming much more physically active.

The **Physical Activity Readiness Medical Examination for Pregnancy (PARmed-X for PREGNANCY)** - to be used by physicians with pregnant patients who wish to become more physically active.

For more information, please contact the:

Canadian Society for Exercise Physiology
202 - 185 Somerset St. West
Ottawa, ON K2P 0J2
Tel. 1-877-651-3755 • FAX (613) 234-3565 • Online: www.csep.ca

Note to physical activity professionals...

It is a prudent practice to retain the completed Physical Activity Readiness Conveyance/Referral Form in the participant's file.



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Continued on page 4...

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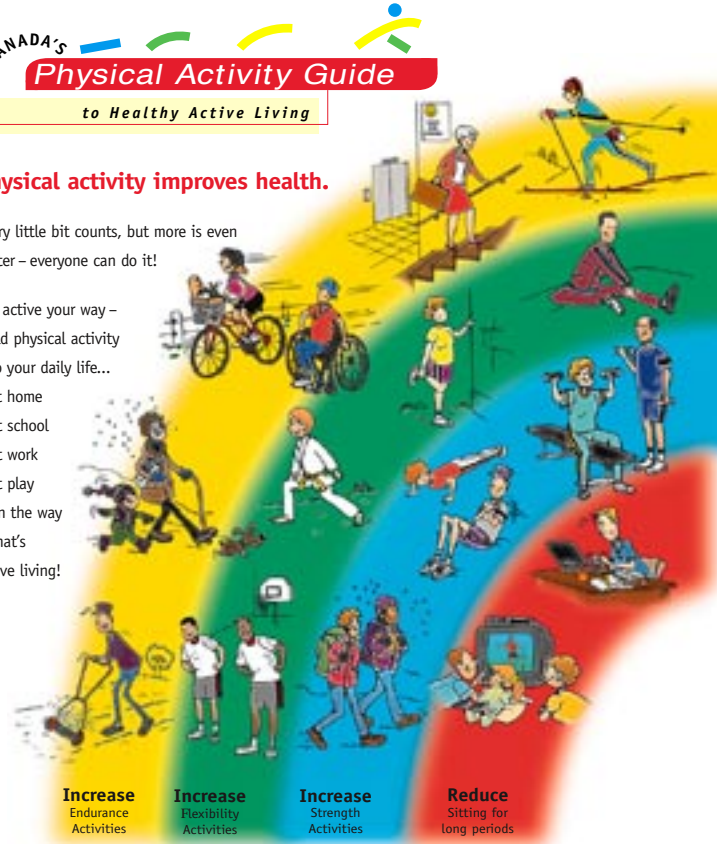
CANADA'S
Physical Activity Guide
to Healthy Active Living

Physical activity improves health.

Every little bit counts, but more is even better – everyone can do it!

Get active your way – build physical activity into your daily life...

- at home
 - at school
 - at work
 - at play
 - on the way
- ...that's active living!



Increase Endurance Activities
Increase Flexibility Activities
Increase Strength Activities
Reduce Sitting for long periods

Choose a variety of activities from these three groups:

Endurance
4-7 days a week
Continuous activities for your heart, lungs and circulatory system.

Flexibility
4-7 days a week
Gentle reaching, bending and stretching activities to keep your muscles relaxed and joints mobile.

Strength
2-4 days a week
Activities against resistance to strengthen muscles and bones and improve posture.

Starting slowly is very safe for most people. Not sure? Consult your health professional.

For a copy of the *Guide Handbook* and more information: 1-888-334-9769, or www.paguide.com

Eating well is also important. Follow *Canada's Food Guide to Healthy Eating* to make wise food choices.

Get Active Your Way, Every Day – For Life!

Scientists say accumulate 60 minutes of physical activity every day to stay healthy or improve your health. As you progress to moderate activities you can cut down to 30 minutes, 4 days a week. Add-up your activities in periods of at least 10 minutes each. Start slowly... and build up.

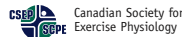
Time needed depends on effort			
Very Light Effort	Light Effort	Moderate Effort	Vigorous Effort
60 minutes	30-60 minutes	20-30 minutes	Maximum Effort
<ul style="list-style-type: none"> • Strolling • Dusting 	<ul style="list-style-type: none"> • Light walking • Volleyball • Easy gardening • Stretching • Dancing • Water aerobics 	<ul style="list-style-type: none"> • Brisk walking • Biking • Raking leaves • Swimming • Hockey • Fast swimming • Water aerobics 	<ul style="list-style-type: none"> • Aerobics • Jogging • Hockey • Basketball • Fast dancing
Range needed to stay healthy			

You Can Do It – Getting started is easier than you think

Physical activity doesn't have to be very hard. Build physical activities into your daily routine.

- Walk whenever you can – get off the bus early, use the stairs instead of the elevator.
- Reduce inactivity for long periods, like watching TV.
- Get up from the couch and stretch and bend for a few minutes every hour.
- Play actively with your kids.
- Choose to walk, wheel or cycle for short trips.
- Start with a 10 minute walk – gradually increase the time.
- Find out about walking and cycling paths nearby and use them.
- Observe a physical activity class to see if you want to try it.
- Try one class to start – you don't have to make a long-term commitment.
- Do the activities you are doing now, more often.

Benefits of regular activity:	Health risks of inactivity:
<ul style="list-style-type: none"> • better health • improved fitness • better posture and balance • better self-esteem • weight control! • stronger muscles and bones • feeling more energetic • relaxation and reduced stress • continued independent living in later life 	<ul style="list-style-type: none"> • premature death • heart disease • obesity • high blood pressure • adult-onset diabetes • osteoporosis • stroke • depression • colon cancer



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Source: Canada's Physical Activity Guide to Healthy Active Living, Health Canada, 1998 <http://www.hc-sc.gc.ca/hppb/paguide/pdf/guideEng.pdf>

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PARmed-X Physical Activity Readiness Conveyance/Referral Form

Based upon a current review of the health status of _____, I recommend:

- No physical activity
- Only a medically-supervised exercise program until further medical clearance
- Progressive physical activity
 - with avoidance of: _____
 - with inclusion of: _____
 - under the supervision of a CSEP-Professional Fitness & Lifestyle Consultant or CSEP-Exercise Therapist™
- Unrestricted physical activity – start slowly and build up gradually

Further Information:

- Attached
- To be forwarded
- Available on request

Physician/clinic stamp:

NOTE: This physical activity clearance is valid for a maximum of six months from the date it is completed and becomes invalid if your medical condition becomes worse.

_____ M.D.

_____ 20____

(date)