



ST. JOSEPH'S CARE GROUP

SUBMAXIMAL GRADED EXERCISE ASSESSMENT

Place Patient Label with Barcode Here

Did the client engage in any of the following within 2 hours prior to the session? (Check all that apply):

- Smoking
- Used caffeine
- Used alcohol
- Took meal
- Exercised
- Other _____

Exercise equipment used: _____ If diabetic, record blood sugar level _____ DNR directive? Yes No

HEART RATE (HR) OUTER LIMIT OF TEST (check box to indicate HR outer limits used for this test)

OPTION 1 (use 60-70% of age predicted max HR):

1. HRmax(pred): $206.9 - (0.67 \times \text{Age}) = \text{_____ bpm}$
2. HR Outer Limits:
 - 70% HRmax(pred) _____ bpm OR
 - 60% HRmax(pred) _____ bpm
 (e.g. beta blockers, diabetic with multiple risk factors, OR lower intensity is warranted)

OPTION 2 (use 45% Heart Rate Reserve):

- 1a. HRmax(pred): $206.9 - (0.67 \times \text{Age}) = \text{_____ bpm}$ OR
- 1b. HRmax(pred) w Beta Blocker = $164 - (0.7 \times \text{Age}) = \text{_____ bpm}$
2. Heart Rate Reserve (HRR):
 - HRR : $\text{HRmax} - \text{HRest} = \text{_____ bpm}$
3. HR Outer Limits:
 - $\text{HRest} + (.45 \text{ of HRR}) = \text{_____ bpm}$

Stage	Time	Heart rate (bpm)	RPE (0-10)	BP (L) (R)	SPM or RPM	Workload	Comments/ Appearance/ O ₂ saturation (if applicable):
Rest							
Pre-test Warm-up	2 min					Negligible	
Stage 1 2 min	4 min						
Stage 1 1 min	5 min						
Stage 2 2 min	7 min						
Stage 2 1 min	8 min						
Stage 3 2 min	10 min						
Stage 3 1 min	11 min						
Stage 4 2 min	13 min						
Stage 4 1 min	14 min						
Cool down 2 min						Negligible	
1-2 min						Negligible	
Post test 1 min							
1 min							
Total Time:	Min	- TURN OVER FOR COMPLETE REASON FOR STOPPING TEST -					

Date: _____ Signature: _____ Name: _____



*PROPEL: Promoting Optimal Exercise for Life, Toronto Rehabilitation Institute-UHN, University of Toronto 2005, Revised 15 June 2015 Copy freely but do not edit

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STOP EXERCISE TEST (proceed to cool-down) when *any* of the following thresholds are met: (v all that apply):

- OR • **HR** reaches / exceeds outer limits of test
- OR • **RPE** reaches 5/10 ('heavy' or 'strong')
- OR • **Cadence** cannot be maintained e.g. decrease >10 spm after 1 warning



ADDITIONAL INDICATIONS TO STOP TEST:

- **Drop in systolic BP** by 10 mm Hg or **a failure of BP to rise** with increase in exercise intensity.....
 - **Excessive rise in BP *** (absolute: systolic 210mmHg or diastolic 105mmHg; if diabetic, diastolic 100mmHg).....
 - **Failure of HR to increase** or **drop in HR** with increased exercise intensity.....
 - **Patient requests to stop** and/or physical manifestations of **severe fatigue**.....
 - **Signs of poor perfusion** e.g. light headaches, confusion, ataxia, pallor, cyanosis, cold clammy skin, etc.....
 - **Onset of angina-like symptoms**.....
 - **Abnormal/severe shortness of breath**.....
 - **Failure of test equipment**.....
- (*Usual clinical practice would be to use more conservative BP cut-off values than outlined above; patient-specific BP cut-off values may also be warranted depending on diagnosis.)

Comments and/or other reason for stopping test:

Date: _____ **Signature:** _____ **Name:** _____

TEST ADMINISTRATION:

- Users of this assessment, for those with stroke, should review the Aerobic Exercise Recommendations to Optimize Best Practices in Care after Stroke (AEROBICS) prior to proceeding.
<http://strokebestpractices.ca/wp-content/uploads/2013/07/AEROBICS-FINAL-July-2013.pdf>
- Prior to implementation, users of this assessment should review the PROPEL: Submaximal Exercise Capacity Assessment guidelines for details of administration.



DO NOT proceed with test, consult a physician, if:

- resting HR is outside 60-100 bmp;
- BP >160/100 or greater than patient-specific cut-off values**
- blood glucose levels are <5.6 or >13.9 mmol/l

Resting BP	Action
SBP<140 DBP<90	<i>OK to exercise</i>
SBP 140-160 DBP 90-100	<i>Maybe OK to exercise but monitor closely**</i>
SBP 160-180 DBP 100-110	<i>Do not exercise, check first with physician</i>
SBP>180 DBP>110	<i>Do not exercise. Alert physician immediately</i>

**More conservative BP restrictions may be warranted for some patients/diagnoses e.g. haemorrhagic stroke, carotid or vertebral dissections +/- stent procedures, diabetes with risk factors. Consult with physician.

CAUTION: If a patient has an abnormal resting ECG, significant cardiovascular disease or multiple risk factors then an ECG-monitored exercise test (submaximal or peak Cardiopulmonary Exercise Stress Test) may be warranted.

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