

## **KIN 6056: Clinical Exercise Prescription Case Study: Billy Blanks Sr.**

Mr. Blanks is a 34 year old electrical engineer who has self-referred to you for assistance with exercise to really do a “make-over” of his appearance. Mr. Blanks wants to “lose some weight” and develop huge biceps and have an overall fit and muscular appearance.

When he starts “lifting again” he often develops a “sore back” which he can “live with” but causes trouble sleeping (pain that increases when he lies in bed) and can hurt when he stands from sitting for long periods of time. The pain is prominent with back extension as in standing up or bending and lifting. The pain is always in his lower back but sometimes he can feel it in his back and left leg. The pain eases, and sometimes even goes away when he exercises, but if he “lifts hard” he states, “I can really pay for it over the next few days.”

Mr. Blanks also works on cars and does yard work, He notices it to be more difficult getting up and down from the ground. He wants to be able to complete his yard work faster, with less breaks and to be less tired afterwards.

Mr. Blanks lifts weights occasionally, plays softball, and enjoys yard work and car maintenance.

Mr. Blanks is willing to work with you three-days per week for 60 – 90 minutes per session and is willing to put in another 30-40 minutes on his own 2-3 additional days during the week.

Mr. Blanks is married, with 2 children and his mother lives with his family. He is a non-smoker, and infrequent drinker of alcoholic beverages.

Mr. Blanks used to be a competitive athlete in high school. His medical history is unremarkable except for chronic, episodic low back pain (CLBP), a meniscectomy on his left-knee in 2008, a broken right tibia in 2004. He states that he has no restrictions for physical activity.



## Billy Blanks P2

### Exercise Testing: (continued)

#### Cardiovascular Fitness:

#### Bruce Protocol Treadmill Test

**Baseline:**                      **RHR:** 84 bpm                      **RBP:** 144/86 mmHg                      **PMHR:** 187 bpm

Stage/Time	METS:	Heart Rate	Blood Pressure	Notes/SX:
Stage 1: 0-3min	4.7	127R	156/80 mmHg	None
Stage 2: 3-6min	7.0	168R	172/78 mmHg	SOB, Fatigue RPE: 16
Stage 3: 6-9min	10	186 R	178/76 mmHg	SOB, Fatigue, RPE: 18
Stage 4: 9-12min	13	188R	178/74 mmHg	SOB, Inability to keep up with belt, Pt request.

**MHR:** 188 bpm

**MBP:** 178/74

**Rate Pressure Product:** 33,464

**%PMHR:** 101%

**Time:** 9'40"

**METSmax:** 10 METs

**ECG:** Normal Sinus Rhythm – no ectopy, no ischemia

#### Muscular Fitness

#### Strength (1RM):

Exercise Test	Absolute Strength	Relative Strength	Qualitative Score	Percentile Rank
Bench Press:	275 lbs.			
Leg Press:	485 lbs.			

#### Muscular Endurance:

Test	Reps	Qualitative Score	Percentile Rank.
Push-ups	32		
YMCA Bench Press	30		
Curl-ups	18		

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# SLOPPY SCREENINGS

Biometric screenings for corporations

Biometric Screening Site: Aerospace Electronics

Screening Date: 3/3/2022

Name: Billy Blanks Sr.      DOB: 9/6/1988

Fasting: NO

<u>Test</u>	<u>Value</u>
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**Lipids:**

Total cholesterol:	220 mg/dl
LDL cholesterol:	--
HDL cholesterol:	--
Triglycerides:	250 mg/dl

**Glucose:**

Glucose:	135 mg/dl
HbA1C:	5.2%

Body weight:	107.5 kg	Height:	188 cm
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Resting HR:	68 bpm	Resting BP:	132/82 mmHg
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# AHA/ACSM HEALTH/FITNESS FACILITY PREPARTICIPATION SCREENING QUESTIONNAIRE

Name: *Billy Blanks Sr.* Date of birth: *9/9/1988* Age:  
Pulse: *72 bpm, Regular* Blood Pressure: *122/76*mmHg

	<b>Assess YOUR health status by marking all true statements</b>
<b>Yes = X</b>	<b>Medications:</b>
	You take prescription medications for your heart.
	You take other prescription medications
	<b>Symptoms:</b>
	You experience chest discomfort with exertion
	You experience unreasonable breathlessness
	You experience dizziness, fainting, blackouts
	<b>History:</b>
	Heart Attack
	Heart Surgery
	Cardiac Catheterization with angioplasty/stent placement (PTCA)
	Heart Valve Disease
	Heart Failure
	Pacemaker/implantable cardiac defibrillator
	Heart Transplant
	Congenital Heart Disease
	<b>Other notable health issues:</b>
	You have diabetes
	You have asthma or lung disease (example: COPD)
	You have burning/cramping sensation in your lower legs walking short distances
<i>X</i>	You have musculoskeletal problems that limit your physical activity
	You have concerns about the safety of exercise
	You are pregnant
	<b>Cardiovascular Risk Factors:</b>
	You are a man over age 45
	You are a woman older than 55 years, have had a hysterectomy or are postmenopausal.
	You smoke or have quit smoking within the previous 6 months
	Your blood pressure is greater than 140/90 mmHg
	You do not know your blood pressure
	You take medication for your blood pressure
<i>X</i>	Your blood cholesterol is greater than 200 mg/dl
<i>X</i>	You do not know your cholesterol level
	You have a close blood relative who had a heart attack or heart surgery before age 55 (father/brother) or 65 (mother/sister)
	You are physically inactive (i.e. your physically active on at least 3 days per week
<i>X</i>	You are more than 20 pounds overweight.

# 2020 PAR-Q+

## The Physical Activity Readiness Questionnaire for Everyone

The health benefits of regular physical activity are clear; more people should engage in physical activity every day of the week. Participating in physical activity is very safe for MOST people. This questionnaire will tell you whether it is necessary for you to seek further advice from your doctor OR a qualified exercise professional before becoming more physically active.

### GENERAL HEALTH QUESTIONS

Please read the 7 questions below carefully and answer each one honestly: check YES or NO.	YES	NO
1) Has your doctor ever said that you have a heart condition <input type="checkbox"/> OR high blood pressure <input type="checkbox"/> ?	<input type="checkbox"/>	<input type="checkbox"/>
2) Do you feel pain in your chest at rest, during your daily activities of living, OR when you do physical activity?	<input type="checkbox"/>	<input type="checkbox"/>
3) Do you lose balance because of dizziness OR have you lost consciousness in the last 12 months? Please answer NO if your dizziness was associated with over-breathing (including during vigorous exercise).	<input type="checkbox"/>	<input type="checkbox"/>
4) Have you ever been diagnosed with another chronic medical condition (other than heart disease or high blood pressure)? PLEASE LIST CONDITION(S) HERE: _____	<input type="checkbox"/>	<input type="checkbox"/>
5) Are you currently taking prescribed medications for a chronic medical condition? PLEASE LIST CONDITION(S) AND MEDICATIONS HERE: _____	<input type="checkbox"/>	<input type="checkbox"/>
6) Do you currently have (or have had within the past 12 months) a bone, joint, or soft tissue (muscle, ligament, or tendon) problem that could be made worse by becoming more physically active? Please answer NO if you had a problem in the past, but it does not limit your current ability to be physically active. PLEASE LIST CONDITION(S) HERE: _____	<input type="checkbox"/>	<input type="checkbox"/>
7) Has your doctor ever said that you should only do medically supervised physical activity?	<input type="checkbox"/>	<input type="checkbox"/>

**If you answered NO to all of the questions above, you are cleared for physical activity. Please sign the PARTICIPANT DECLARATION. You do not need to complete Pages 2 and 3.**

- Start becoming much more physically active – start slowly and build up gradually.
- Follow Global Physical Activity Guidelines for your age (<https://apps.who.int/iris/handle/10665/44399>).
- You may take part in a health and fitness appraisal.
- If you are over the age of 45 yr and NOT accustomed to regular vigorous to maximal effort exercise, consult a qualified exercise professional before engaging in this intensity of exercise.
- If you have any further questions, contact a qualified exercise professional.

#### PARTICIPANT DECLARATION

If you are less than the legal age required for consent or require the assent of a care provider, your parent, guardian or care provider must also sign this form.

I, the undersigned, have read, understood to my full satisfaction and completed this questionnaire. I acknowledge that this physical activity clearance is valid for a maximum of 12 months from the date it is completed and becomes invalid if my condition changes. I also acknowledge that the community/fitness center may retain a copy of this form for its records. In these instances, it will maintain the confidentiality of the same, complying with applicable law.

NAME \_\_\_\_\_ DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_ WITNESS \_\_\_\_\_

SIGNATURE OF PARENT/GUARDIAN/CARE PROVIDER \_\_\_\_\_

**If you answered YES to one or more of the questions above, COMPLETE PAGES 2 AND 3.**

#### Delay becoming more active if:

- You have a temporary illness such as a cold or fever; it is best to wait until you feel better.
- You are pregnant - talk to your health care practitioner, your physician, a qualified exercise professional, and/or complete the ePARmed-X+ at [www.eparmedx.com](http://www.eparmedx.com) before becoming more physically active.
- Your health changes - answer the questions on Pages 2 and 3 of this document and/or talk to your doctor or a qualified exercise professional before continuing with any physical activity program.