WORLD TRIATHLON PRE-PARTICIPATION MEDICAL EXAM

This letter is to outline the guidelines for Triathlon Canada's policy for World Triathlon Athlete Pre-Participation Medical Exam (PPE).

GUIDANCE TO DOCTORS

As a member nation of World Triathlon, Triathlon Canada is required to document ANNUAL medical clearance for all World Triathlon eligible **triathlon**, **paratriathlon** and **multisport** athletes in the **youth, junior, U23** and **Elite** categories prior to competing in a World Triathlon sanctioned event, which may include international, national and provincial events.

The purpose of the PPE is to screen for injuries or medical conditions that may place an athlete at risk for safe participation in competitive triathlon. Athletes may be affected by conditions that do not have overt symptoms and that can only be detected by periodic health evaluations.

Upon completion of the PPE, you are asked to certify that the athlete is either;

1. Fully available to compete and participate in triathlon;
2. Conditional: Available to compete and participate in triathlon this year, with non-urgent follow up required;
3. Not available to compete and participate in triathlon;

An athlete identified as ***"Conditional: Available to compete in participate in triathlon this year, with non-urgent follow up required"*** will be allowed to participate in Triathlon this year but will need to be declared "***Fully available"*** the following year.

An athlete identified as "***Not available to compete and participate in triathlon***" will not be allowed to participate in organized triathlon activities at the International, National or Provincial level until medically cleared.

If you have any questions, please contact Triathlon Canada (hp@triathloncanada.com)

The following questions are all required for 2027:

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ATHLETE INFO

ATHLETE NAME (first, last)	
DATE OF BIRTH (dd-mm-yyyy)	
GENDER	
EMAIL ADDRESS	

PERSONAL and FAMILY HISTORY

Has your participation in sport or physical activity ever been discouraged, or prevented by a doctor for medical reasons (i.e. failed pre-participation medical exam)?	NO	
	YES	
IF YES- please provide details		

Do any of your family have a history of any of the following conditions (in male relatives under 55 years old; or female relatives under 65 years old):

Sudden death for no apparent reason (i.e. drowning, unexplained car accident, or sudden infant death syndrome)?	NO	
	YES	
IF YES- please provide details		
Family history of other heart problems including irregular heart rate (arrhythmia), enlarged heart, cardiomyopathy, heart surgery, heart medication, pacemaker or defibrillator?	NO	
	YES	
IF YES- please provide details		
Family history of high blood pressure, high cholesterol or fainting?	NO	
	YES	
IF YES- please provide details		
Family history of Marfan syndrome? *Please see Appendix A for details on Marfan's syndrome.*	NO	
	YES	
IF YES- please provide details		
Family history of strokes or seizures?	NO	
	YES	
IF YES- please provide details		

Have you taken any prescription medication in the past 6 months?	NO	
	YES	
IF YES- please provide details		
Have you taken any non-prescription supplements in the past 6 months?	NO	
	YES	
IF YES- please provide details		

HEART HEALTH

Chest pain, discomfort, tightness, and/or pressure while exercising or after exercising?	NO	
	YES	
IF YES- please provide details		
Unexplained fainting, near fainting, or passed out for no apparent reason during or after exercising?	NO	
	YES	
IF YES- please provide details		
Excessive or unexplained shortness of breath, lightheadedness, or fatigue that is out of proportion to the degree of physical effort?	NO	
	YES	
IF YES- please provide details		
Do you get more tired or short of breath more quickly than your friends during exercise?	NO	
	YES	
IF YES- please provide details		
Does your heart beat very fast, or skip beats (i.e. irregular heartbeat) at any time, including during exercise?	NO	
	YES	
IF YES- please provide details		
Have you ever been diagnosed with a heart murmur, high blood pressure, high cholesterol, heart infection, heart inflammation, rheumatic fever, heart valve problems, or any other heart condition?	NO	
	YES	
IF YES- please provide details		

Have you ever had an unexplained seizure?	NO	
	YES	
IF YES- please provide details		

HEART HEALTH EXAM

PHYSICAL EXAM

Musculoskeletal and ocular features suggestive of Marfan syndrome? *Please see Appendix A for details on Marfan syndrome.*	NO	
	YES	
IF YES- please provide details		
Diminished and delayed femoral or radial arterial pulses?	NO	
	YES	
IF YES- please provide details		
Mid- or end-systolic clicks?	NO	
	YES	
IF YES- please provide details		
Abnormal second heart sounds?	NO	
	YES	
IF YES- please provide details		
Heart murmurs (systolic and any diastolic)?	NO	
	YES	
IF YES- please provide details		
Irregular heart rhythm?	NO	
	YES	
IF YES- please provide details		
Elevated brachial bilateral blood pressure?	NO	
	YES	
IF YES- please provide details		

HEART HEALTH EXAM: 12-Lead ECG

The 12-lead ECG should be recorded on a non-training day, during rest, according to best clinical practice. The ECG is required every year for athletes of minor age. For athletes of majority age every 2nd year.

IMPORTANT NOTE: An athlete presenting with no risks in the questionnaire and heart health exam may be identified as "Conditional" pending the results of the ECG. This will allow conditional participation should schedule conflicts arise.

Were there any abnormalities in the ECG?	NO	
	YES	
IF YES- please provide details		
CONDITIONAL: please indicate ECG appointment date		

OTHER MEDICAL CONDITIONS

BREATHING

Have you been treated or hospitalized for asthma?	NO	
	YES	
IF YES- please provide details		
Do you suffer from any symptoms of breathing problems that make exercising difficult, including wheezing, cough, postnasal drip, hay fever, or repeated flu-like illness?	NO	
	YES	
IF YES- please provide details		
Have you ever had bronchitis, pneumonia, tuberculosis, cystic fibrosis or any other breathing problems?	NO	
	YES	
IF YES- please provide details		

ILLNESS

In the past 30 days, have you had any flu or viral illnesses like symptoms (i.e. runny nose, chest congestion, headaches, generalized aches or muscle soreness)?	NO	
	YES	
IF YES- please provide details		

Have you ever suffered from any symptoms of blood disorders such as low iron stores, anemia, sickle cell related problems, abnormal bleeding, clotting disorders, blood clots or other blood disorders?	NO	
	YES	
IF YES- please provide details		
Have you ever suffered from any symptoms of diseases of the nervous system including past history of stroke or transient ischaemic attack (TIA), frequent headaches, dizziness, blackouts, seizures, epilepsy, depression, anxiety attacks, muscle weakness, nerve tingling, loss of sensation, muscle cramps, or chronic	NO	
	YES	
IF YES- please provide details		

ALLERGIES

Have you ever suffered from any symptoms of allergies including allergies to pollen, foods, medication, any plant material or any animal material?	NO	
	YES	
IF YES- please provide details		

CONTACT INFORMATION

MEDICAL DOCTOR

PRINT NAME _____ LICENSE NUMBER _____

_____ _____

Signature Date

FULL ADDRESS

Apt no or suite no	
Number and Street	
City or Town	
Province/Territory	
Postal Code	
Office telephone	

To the best of my knowledge and in my professional opinion, I declare the undersigned athlete to be:

STATUS	INITIALS
Fully available to compete and participate in triathlon	

Conditional: Available to compete and participate in triathlon, with non-urgent follow up required;	
Not available to compete and participate in triathlon	

ATHLETE

PRINT NAME

Signature Date

If athlete is under 18 year of age, a parent or guardian must also sign this form

PARENT OR GUARDIAN

PRINT NAME

Signature Date

APPENDIX A

MARFAN's SYMDROME

Here is a quick physician's summary for the scoring of systemic features of Marfan's Syndrome

1. Wrist and thumb sign – 3 points (wrist or thumb sign – 1 point)
2. Pectus carinatum deformity – 2 points (pectus excavatum or chest asymmetry – 1 point)
3. Hindfoot deformity – 2 points (plain pes planus – 1 point)
4. Protrusio acetabuli – 2 points
5. Reduced upper segment/lower body segment ratio and increased arm/height ***AND*** no severe scoliosis –1 point
6. Scoliosis or thoracolumbar kyphosis – 1 point
7. Reduced elbow extension – 1 point
8. Facial features (3/5) – 1 point (dolichocephaly, enophthalmos, downslanting palpebral fissures, malar
hypoplasia, retrognathia)
9. Skin striae – 1 point
10. Spontaneous pneumothorax – 2 points
11. Myopia .3 diopters – 1 point
12. Mitral valve prolapse (all types) – 1 point
13. Dural ectasia – 2 points

Scoring 7 or more points is considered positive for major systemic involvement Marfan's Syndrome.

Marfan's Syndrome: Physical
Exam criteria Major Criteria

1. Positive wrist and thumb sign
    - The wrist sign is positive when the tip of the thumb covers the entire fingernail of the fifth finger when wrapped around the contralateral wrist.
    - The thumb sign is positive when the entire distal phalanx of the adducted thumb extends beyond the ulnar border of the palm with or without the assistance of the patient or examiner to achieve maximal adduction.
2. Pectus carinatum
    - protrusion deformity of the anterior chest wall
    - Chondrogladiolar prominence: middle and lower portions of the sternum protrude and arch forward
    - Chondromanubrial prominence: upper portion of the sternum protrudes anteriorly, and the body of the sternum is deviated posteriorly.
        i. anterior deflection of the distal sternum gives a Z-shape to the sternum on a lateral view

- Pectus excavatum
    i. sternal depression typically beginning over the midportion of the manubrium and progressing inward through the xiphoid process

3. Hindfoot deformity
    - Medial displacement of the medial malleolus causing pes planus
        i. Forefoot abduction and lowering of the midfoot
        ii. Evaluate from anterior and posterior views
        iii. Pes planus (flat foot) without hindfoot valgus is assigned one point.
4. Protrusio acetabuli of any degree
    - Medial protrusion of the acetabulum
        i. Can be diagnosed by plain radiograph, CT, or MRI.
    - On an anterior-posterior pelvic film, medial protrusion of the acetabulum ≥3 mm beyond the ilio-ischial (Kohler) line
5. Reduced upper segment/lower body segment ratio and increased arm/height AND no severe scoliosis
    - Upper to lower segment ratio < 0.85
        i. Lower segment = distance from the top of the symphysis pubis to the floor in the standing position
        ii. upper segment is the height minus the lower segment
    - Or arm span to height ratio >1.05
    - Scoliosis can distort body measurements and hence ratios
6. Scoliosis >20 degrees or spondylolisthesis
    - With the patient bending forward, observation of a vertical difference of ≥1.5 cm between the ribs of the left and right hemithorax
    - If scoliosis not present, one point given for kyphosis if exaggerated kyphotic thoracolumbar spinal curvature
7. Lack of full extension at elbows <170 degrees
8. Facial features (3 of 5)
    - Dolichocephaly (reduced cephalic index or head width/length ratio)
    - Enophthalmos (eye posteriorly displaced in orbit)
    - Downslanting palpebral fissures
    - Malar hypoplasia: abnormally flat cheek bones
    - Retrognathia: abnormal posterior positioning of the maxilla or mandible relative to the facial skeleton and soft tissues
9. Striae distensae
    - if they are not associated with pronounced weight changes or pregnancy
    - Particularly if they have an uncommon location such as the mid back, lumbar region, upper arm, axillary region, or thigh
10. History of a spontaneuous pneumothorax
11. Myopia: 0.3 diopters
12. Mitral valve prolapse

13. Lumbrosacral dural ectasia
    - Enlargement of the spinal canal as seen on imaging owing to progressive ectasia of dura and neural foramina and to erosion of vertebral bone

Other Important Major Diagnostic Indicators of Marfan Syndrome:

- The presence of any of these findings may strongly suggest the presence of Marfan Syndrome

Ocular System

- Ectopia lentis of any degree

Cardiovascular system

- Aneurysm of the ascending aorta involving at least the sinuses of Valsalva
- Dissection of the ascending aorta