

PREPARTICIPATION PHYSICAL EVALUATION 5th EDITION

Henry Pelto, MD

Primary Care Sports Medicine

Virginia Mason Franciscan Health

Medical Director and Team Physician, Seattle Kraken

Team Physician, Seattle Mariners



OBJECTIVES

- Describe the purpose of the Preparticipation Physical Evaluation
- Describe the differences between the PPE 5th edition and prior versions of the PPE
- List the “red flag” items of the PPE-5 that would necessitate holding from participation
- Understand the impact of COVID-19 on the PPE

THE PREPARTICIPATION PHYSICAL EXAMINATION

- Some version of this has been done for a long time
 - First recommendations formalized in what we now see as the PPE in 1992
- Little to no evidence supporting the PPE for improving long term athlete health outcomes
- Still, by general healthcare system consensus, felt to be an important part of promoting the health and well being of athletes.
- Gap to those who don't participate in school-based sports
 - Prior to school sports, no sport at the school, general physically active youth
- Wide variability in frequency, form used, questions, who is allowed to perform
 - Every state has requirement for HS athletes
- Purpose is to promote safe participation, not exclude though this happens relatively often (03.-1.3% excluded, 3.2-13.9% require further evaluation)

> Clin J Sport Med. 2014 Mar;24(2):142-9. doi: 10.1097/JSM.0000000000000008.

The preparticipation physical evaluation: an analysis of clinical practice

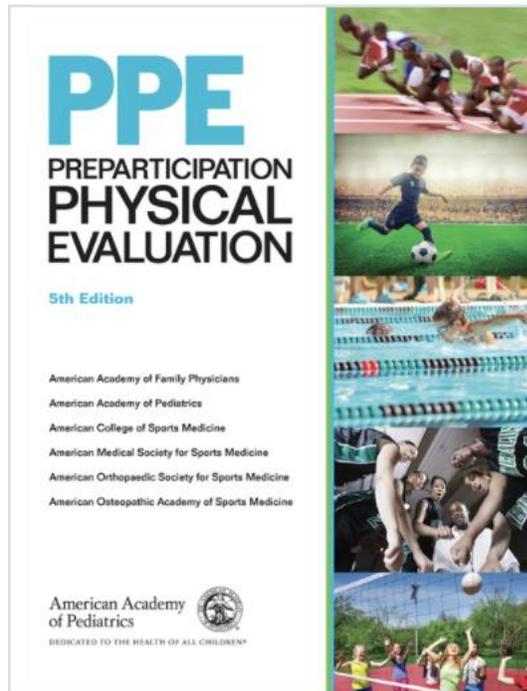
Nicolas L Madsen ¹, Jonathan A Drezner, Jack C Salerno

Awareness of the PPE

Physicians – 37%
Athletic Directors – 6%

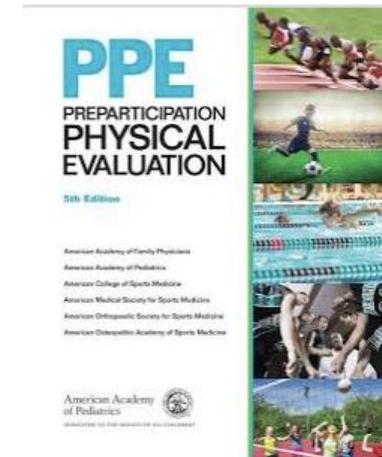
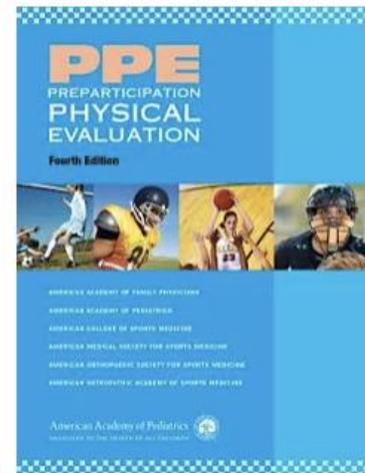
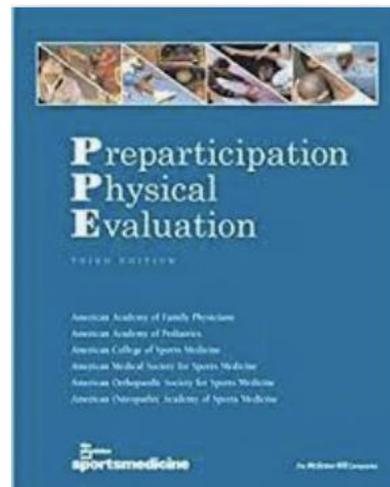
GOALS OF THE PPE

GOALS OF THE PPE	
1.	Determine general physical and psychological health
2.	Evaluate for conditions that may be life threatening or disabling
3.	Evaluate for conditions that may predispose to injury or illness
4.	Provide an opportunity for discussion of health and lifestyle issues
5.	Serve as an entry point in the health care system for adolescents without a health care or medical home



CHANGES FROM PRIOR EDITIONS

- History questions refined (less!!)
- Integration into periodic routine exam with PCP
 - Most appropriate care and advocating for EMR inclusion for future studies
- Dedicated questions regarding mental health
 - Further discussions regarding bullying, substance abuse, sexual assault
- Section on transgender athletes
- More recent updated guidance on the PPE during COVID-19



MEDICAL HISTORY

This form should be placed into the athlete's medical file and should *not* be shared with schools or sports organizations.

■ PREPARTICIPATION PHYSICAL EVALUATION

HISTORY FORM

Note: Complete and sign this form (with your parents if younger than 18) before your appointment.

Name: _____ Date of birth: _____

Date of examination: _____ Sport(s): _____

Sex assigned at birth (F, M, or intersex): _____ How do you identify your gender? (F, M, or other): _____

List past and current medical conditions. _____

Have you ever had surgery? If yes, list all past surgical procedures. _____

Medicines and supplements: List all current prescriptions, over-the-counter medicines, and supplements (herbal and nutritional). _____

Do you have any allergies? If yes, please list all your allergies (ie, medicines, pollens, food, stinging insects). _____

Patient Health Questionnaire Version 4 (PHQ-4)

Over the last 2 weeks, how often have you been bothered by any of the following problems? (Circle response.)

	Not at all	Several days	Over half the days	Nearly every day
Feeling nervous, anxious, or on edge	0	1	2	3
Not being able to stop or control worrying	0	1	2	3
Little interest or pleasure in doing things	0	1	2	3
Feeling down, depressed, or hopeless	0	1	2	3

(A sum of >3 is considered positive on either subscale [questions 1 and 2, or questions 3 and 4] for screening purposes.)

GENERAL QUESTIONS (Explain "Yes" answers at the end of this form. Circle questions if you don't know the answer.)	Yes	No
1. Do you have any concerns that you would like to discuss with your provider?		
2. Has a provider ever denied or restricted your participation in sports for any reason?		
3. Do you have any ongoing medical issues or recent illness?		
HEART HEALTH QUESTIONS ABOUT YOU	Yes	No
4. Have you ever passed out or nearly passed out during or after exercise?		
5. Have you ever had discomfort, pain, tightness, or pressure in your chest during exercise?		
6. Does your heart ever race, flutter in your chest, or skip beats (irregular beats) during exercise?		
7. Has a doctor ever told you that you have any heart problems?		
8. Has a doctor ever requested a test for your heart? For example, electrocardiography (ECG) or echocardiography.		

HEART HEALTH QUESTIONS ABOUT YOU (CONTINUED)	Yes	No
9. Do you get light-headed or feel shorter of breath than your friends during exercise?		
10. Have you ever had a seizure?		
HEART HEALTH QUESTIONS ABOUT YOUR FAMILY	Yes	No
11. Has any family member or relative died of heart problems or had an unexpected or unexplained sudden death before age 35 years (including drowning or unexplained car crash)?		
12. Does anyone in your family have a genetic heart problem such as hypertrophic cardiomyopathy (HCM), Marfan syndrome, arrhythmogenic right ventricular cardiomyopathy (ARVC), long QT syndrome (LQTS), short QT syndrome (SQTs), Brugada syndrome, or catecholaminergic polymorphic ventricular tachycardia (CPVT)?		
13. Has anyone in your family had a pacemaker or an implanted defibrillator before age 35?		

BONE AND JOINT QUESTIONS	Yes	No
14. Have you ever had a stress fracture or an injury to a bone, muscle, ligament, joint, or tendon that caused you to miss a practice or game?		
15. Do you have a bone, muscle, ligament, or joint injury that bothers you?		
MEDICAL QUESTIONS	Yes	No
16. Do you cough, wheeze, or have difficulty breathing during or after exercise?		
17. Are you missing a kidney, an eye, a testicle (males), your spleen, or any other organ?		
18. Do you have groin or testicle pain or a painful bulge or hernia in the groin area?		
19. Do you have any recurring skin rashes or rashes that come and go, including herpes or methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)?		
20. Have you had a concussion or head injury that caused confusion, a prolonged headache, or memory problems?		
21. Have you ever had numbness, had tingling, had weakness in your arms or legs, or been unable to move your arms or legs after being hit or falling?		
22. Have you ever become ill while exercising in the heat?		
23. Do you or does someone in your family have sickle cell trait or disease?		
24. Have you ever had or do you have any problems with your eyes or vision?		

MEDICAL QUESTIONS (CONTINUED)	Yes	No
25. Do you worry about your weight?		
26. Are you trying to or has anyone recommended that you gain or lose weight?		
27. Are you on a special diet or do you avoid certain types of foods or food groups?		
28. Have you ever had an eating disorder?		
FEMALES ONLY	Yes	No
29. Have you ever had a menstrual period?		
30. How old were you when you had your first menstrual period?		
31. When was your most recent menstrual period?		
32. How many periods have you had in the past 12 months?		

Explain "Yes" answers here.

I hereby state that, to the best of my knowledge, my answers to the questions on this form are complete and correct.

Signature of athlete: _____

Signature of parent or guardian: _____

Date: _____

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- Answers from parent/guardian AND athlete
 - Very low concordance
- Balance extended history and confidentiality
- Goal to gather history to allow safe participation not to exclude from participation

CARDIOVASCULAR

GENERAL QUESTIONS (Explain "Yes" answers at the end of this form. Circle questions if you don't know the answer.)	Yes	No
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 Medicines and supplements: List all current prescriptions, over-the-counter medicines, and supplements (herbal and nutritional): _____
 Do you have any allergies? If yes, please list all your allergies (ie, medicines, pollen, food, stinging insects): _____

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8. Has a doctor ever requested a test for your heart? For example, electrocardiography (ECG) or echocardiography.					

- Primary goal is to identify conditions that may predispose to sudden cardiac death
- Secondary goal of identifying potential chronic/lifelong issues (eg HTN, CAD risk)
- Three highest yield questions:
 - History of EXERTIONAL syncope
 - History of unexplained seizure
 - Family history of SCA/cardiac issue prior to age 35

CARDIOVASCULAR

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 Date of examination: _____ Sport(s): _____
 Sex (mailed or please in doing things): _____ Have you ever had surgery? If yes, list all past surgical procedures: _____
 Sex (mailed or please in doing things): _____ Have you ever had a seizure? (If No or other): _____

List past and current medical conditions: _____
 Have you ever had surgery? If yes, list all past surgical procedures: _____
 Medicines and supplements: List all current prescriptions, over-the-counter medicines, and supplements (herbal and nutritional): _____
 Do you have any allergies? If yes, please list all your allergies (ie, medicines, pollen, food, stinging insects): _____

Parent Health Questionnaire Version 4 (PHQ-4)
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	Not at all	Several days	Over half the days	Nearly every day
Felling nervous, anxious, or on edge	0	1	2	3
Not being able to stop or control worrying	0	1	2	3
Little interest or pleasure in doing things	0	1	2	3
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Table Causes of Common Cardiac Death in Young Athletes

Structurally Normal Heart	Structurally Abnormal Heart
Brugada syndrome	Hypertrophic cardiomyopathy
Long QT syndrome	Arrhythmogenic right ventricular cardiomyopathy
Catecholaminergic polymorphic ventricular tachycardia	Dilated cardiomyopathy
Commotio cordis	Left ventricular noncompaction
Other channelopathies	Congenital abnormalities of the coronary arteries
Electrolyte abnormalities	Marfan syndrome
Wolf Parkinson White syndrome	Valvular heart disease
	Myocarditis
	Coronary artery disease (athletes >35 years old)

CARDIOVASCULAR

EXAMINATION		
Height:	Weight:	
BP: / (/)	Pulse:	Vision: R 20/ L 20/ Corrected: <input type="checkbox"/> Y <input type="checkbox"/> N
	NORMAL	ABNORMAL FINDINGS
Appearance <ul style="list-style-type: none"> Marfan stigmata (kyphoscoliosis, high-arched palate, pectus excavatum, arachnodactyly, hyperlaxity, myopia, mitral valve prolapse [MVP], and aortic insufficiency) 		
Eyes, ears, nose, and throat <ul style="list-style-type: none"> Pupils equal Hearing 		
Lymph nodes		
Heart ^a <ul style="list-style-type: none"> Murmurs (auscultation standing, auscultation supine, and ± Valsalva maneuver) 		
Lungs		
Abdomen		
Skin		

Auscultatory Finding	Significance
<ul style="list-style-type: none"> Harsh, loud (usually \geq grade 3), systolic ejection murmur Loudest right upper sternal border Increases with maneuvers that decrease venous return (ie, Valsalva, or moving from squatting to standing) 	HCM-associated LV outflow tract obstruction
<ul style="list-style-type: none"> Systolic ejection murmur heard best at right upper sternal border Radiation to neck Diminishes with maneuvers that decrease venous return (ie, Valsalva) and increases with maneuvers that increase venous return (ie, squatting) 	Aortic stenosis
<ul style="list-style-type: none"> Holosystolic murmur heard best at the apex Radiation to axilla 	Mitral valve regurgitation and possible dilated cardiomyopathy or HCM
<ul style="list-style-type: none"> Diastolic murmur heard at right upper sternal border Murmur accentuated with hand grip (increased systemic vascular resistance) 	Aortic valve insufficiency and possible Marfan syndrome or bicuspid aortic valve
<ul style="list-style-type: none"> High-frequency diastolic murmur heard best at left upper sternal border 	Pulmonary valve insufficiency from primary pulmonary hypertension (Graham Steele murmur)
<ul style="list-style-type: none"> Soft early systolic murmur heard best at the upper sternal border while supine (increased venous return) Murmur often absent or diminished when standing or sitting and with Valsalva maneuver 	Physiological (hyperdynamic) flow murmur in a well-trained athlete

CARDIOVASCULAR

ECG

- Electrocardiogram can be considered as an additional component of the PPE
- Controversial topic worthy of ongoing debate and refinement
- Consider athlete specific and systems issues in your area
- If ECG is performed always interpret based on International Criteria for interpretation of ECG in athletes

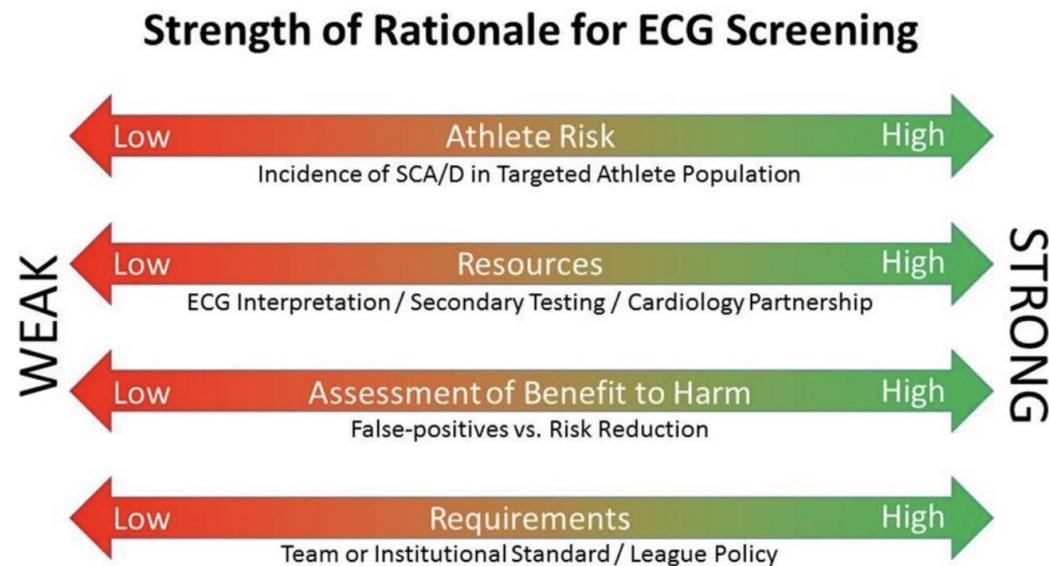


Figure 1 Major considerations and strength of rationale for electrocardiogram screening. SCA/D, sudden cardiac arrest/death.

CARDIOVASCULAR

ECG

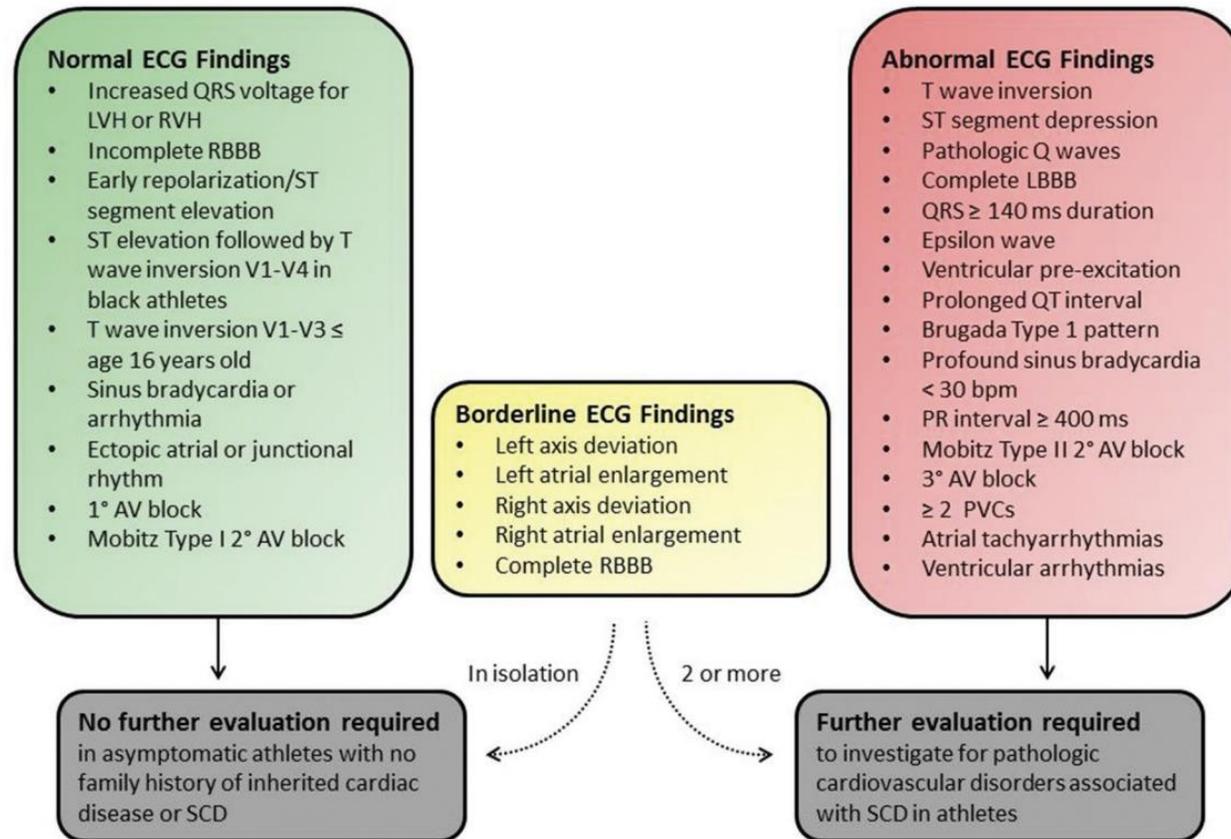


Figure 1 International consensus standards for ECG interpretation in athletes. AV, atrioventricular; LBBB, left bundle branch block; LVH, left ventricular hypertrophy; PVC, premature ventricular contraction; RBBB, right bundle branch block; RVH, right ventricular hypertrophy; SCD, sudden cardiac death.

NEUROLOGIC

MEDICAL QUESTIONS	Yes	No
16. Do you cough, wheeze, or have difficulty breathing during or after exercise?		
17. Are you missing a kidney, an eye, a testicle (males), your spleen, or any other organ?		
18. Do you have groin or testicle pain or a painful bulge or hernia in the groin area?		
19. Do you have any recurring skin rashes or rashes that come and go, including herpes or methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)?		
20. Have you had a concussion or head injury that caused confusion, a prolonged headache, or memory problems?		
21. Have you ever had numbness, had tingling, had weakness in your arms or legs, or been unable to move your arms or legs after being hit or falling?		
22. Have you ever become ill while exercising in the heat?		
23. Do you or does someone in your family have sickle cell trait or disease?		
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HEART HEALTH QUESTIONS ABOUT YOU (CONTINUED)	Yes	No
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10. Have you ever had a seizure?		
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NEUROLOGIC CONCUSSION

- Sport related concussion is common in all sports and under-reported
- Return to sport requires resolution of symptoms and graded return to activity progression
- Most symptoms resolve in 1-2 weeks some last months +
- Consider other psychosocial factors in prolonged recovery
- There is no “too many” concussion number, individualized evaluation and decision making

20. Have you had a concussion or head injury that caused confusion, a prolonged headache, or memory problems?		
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Seattle Children's HOSPITAL • RESEARCH • FOUNDATION

Your Visit Conditions **Clinics** Research Health & Safety

Clinics > Orthopedics and Sports Medicine > Treatment and Services >

Treatment and Services

Seattle Sports Concussion Program

What is the Seattle Sports Concussion Program?

The Seattle Sports Concussion Program is an affiliate program among Seattle Children's Hospital, Harborview Medical Center and UW Medicine.

Sports Concussion Program at Harborview

Make an Appointment

206.744.8000

Ninth & Jefferson Building, 908 Jefferson St., 5th Floor, Seattle, WA 98104

SCAT5[®] SPORT CONCUSSION ASSESSMENT TOOL – 5TH EDITION

DEVELOPED BY THE CONCUSSION IN SPORT GROUP FOR USE BY MEDICAL PROFESSIONALS ONLY

supported by

Patient details

Name: _____

DOB: _____

Address: _____

ID number: _____

Examiner: _____

Date of Injury: _____ Time: _____

WHAT IS THE SCAT5?

The SCAT5 is a standardized tool for evaluating concussions designed for use by physicians and licensed healthcare professionals¹. The SCAT5 cannot be performed correctly in less than 10 minutes.

If you are not a physician or licensed healthcare professional, please use the Concussion Recognition Tool 5 (CRT5). The SCAT5 is to be used for evaluating athletes aged 13 years and older. For children aged 12 years or younger, please use the SCAT5.

Key points

- Any athlete with suspected concussion should be REMOVED FROM PLAY, medically assessed and monitored for deterioration. No athlete diagnosed with concussion should be returned to play on the day of injury.
- If an athlete is suspected of having a concussion and medical personnel are not immediately available, the athlete should be referred to a medical facility for urgent assessment.

NEUROLOGIC SPINAL CORD/BRACHIAL PLEXUS

- Cervical cord neuropraxia
 - Motor and/or sensory symptoms in one or more extremity
 - Spinal cord injury by definition
 - Should prompt evaluation of cervical spinal stenosis regardless of circumstances
- “Stinger” (“burner”) is transient brachial plexus injury
 - ALWAYS unilateral
 - Can return to play when symptoms resolved and exam normal

21. Have you ever had numbness, had tingling, had weakness in your arms or legs, or been unable to move your arms or legs after being hit or falling?		
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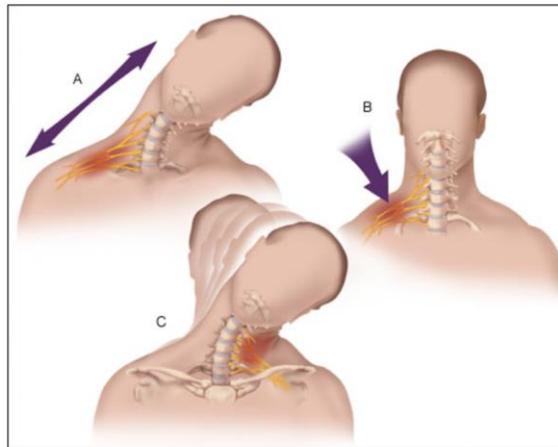


Illustration © 1999 Renee L. Cannon



NEUROLOGIC SEIZURE

- Unexplained seizure should be evaluated as underlying cardiac condition
- Diagnosed seizure disorder should not preclude from participation
 - Rather flag to ensure appropriate evaluation and management.
 - Specific sport participation eg swimming, diving, prolonged isolated training should prompt further informed conversation

10. Have you ever had a seizure?		
----------------------------------	--	--

Recognition of SCA

- SCA should be suspected in any athlete who is collapsed and unresponsive
- SCA should be suspected in any non-traumatic collapse
- Brief seizure-like activity is common after collapse from SCA
- Seizure = SCA until proven otherwise
- Occasional gasping is not normal breathing... think SCA

GENERAL MEDICAL

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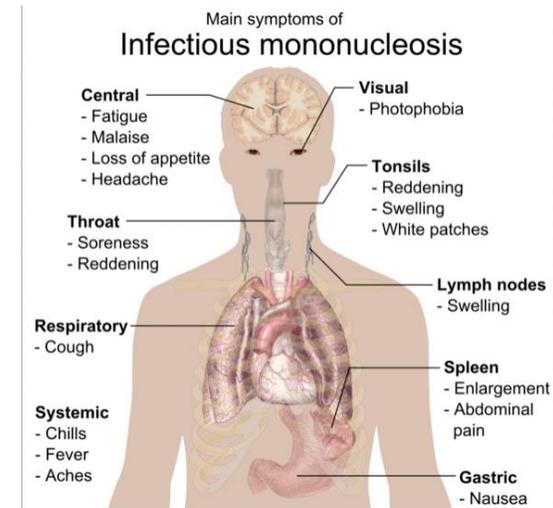
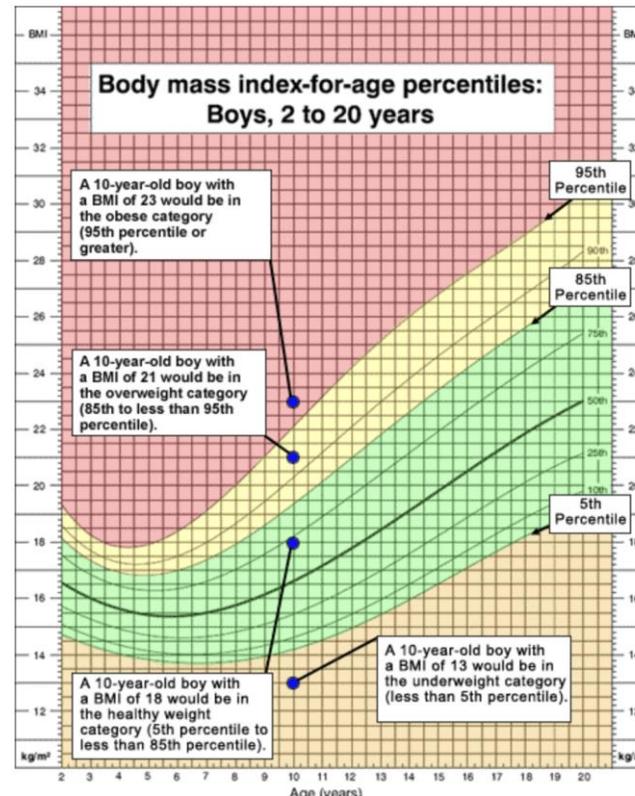
HEART HEALTH QUESTIONS ABOUT YOU Yes No

HEART HEALTH QUESTIONS ABOUT YOU (CONTINUED)	Yes	No
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GENERAL MEDICAL

- Typically, used to reveal medical issues not answer/asked elsewhere
 - Eg prior restriction or medication
- Also, can serve goal of establishing care/entry into medical system for non-participation limiting medical issues
 - Eg weight, allergies



HEAT RELATED ILLNESS

- Exertional heat stroke third leading cause of death in H.S. athletes
- Gradual acclimatization particularly in “harsher” environments
- Warning signs and prompt treatment education
- If history probe for underlying etiology
 - Eg medications, malignant hyperthermia
- Sickle cell trait increases risk of sudden death with exercise particularly in hot environments or at altitude
- Screening required for NCAA, not widely recommended otherwise

22. Have you ever become ill while exercising in the heat?		
23. Do you or does someone in your family have sickle cell trait or disease?		



VISION/EYE DISORDERS

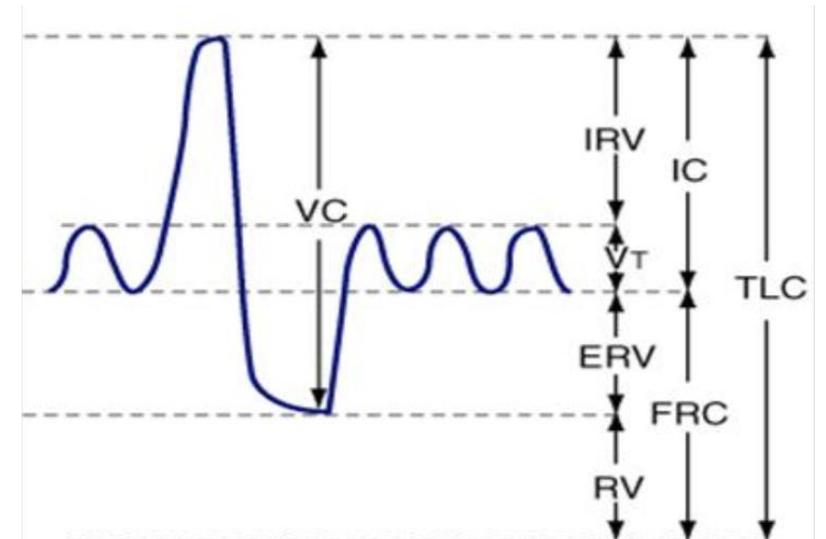
MEDICAL QUESTIONS	Yes	No
16. Do you cough, wheeze, or have difficulty breathing during or after exercise?		
17. Are you missing a kidney, an eye, a testicle (males), your spleen, or any other organ?		
18. Do you have groin or testicle pain or a painful bulge or hernia in the groin area?		
19. Do you have any recurring skin rashes or rashes that come and go, including herpes or methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)?		
20. Have you had a concussion or head injury that caused confusion, a prolonged headache, or memory problems?		
21. Have you ever had numbness, had tingling, had weakness in your arms or legs, or been unable to move your arms or legs after being hit or falling?		
22. Have you ever become ill while exercising in the heat?		
23. Do you or does someone in your family have sickle cell trait or disease?		
24. Have you ever had or do you have any problems with your eyes or vision?		

- Vision should be checked at each PPE
- Refer for correction if worse than 20/20 in either eye
- Worse than 20/40 and high risk sports should always wear eye protection
 - Specifically sports with projectile

RESPIRATORY

BONE AND JOINT QUESTIONS	Yes	No
14. Have you ever had a stress fracture or an injury to a bone, muscle, ligament, joint, or tendon that caused you to miss a practice or game?		
15. Do you have a bone, muscle, ligament, or joint injury that bothers you?		
MEDICAL QUESTIONS	Yes	No
16. Do you cough, wheeze, or have difficulty breathing during or after exercise?		
17. Are you missing a kidney, an eye, a testicle (males), your spleen, or any other organ?		
18. Do you have groin or testicle pain or a painful bulge or hernia in the groin area?		
19. Do you have any recurring skin rashes or rashes that come and go, including herpes or methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)?		
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21. Have you ever had numbness, had tingling, had weakness in your arms or legs, or been unable to move your arms or legs after being hit or falling?		
22. Have you ever become ill while exercising in the heat?		
23. Do you or does someone in your family have sickle cell trait or disease?		
24. Have you ever had or do you have any problems with your eyes or vision?		

- Primary goal is identification of asthma or exercise induced bronchospasm (EIB)
- Question for appropriate diagnostic testing and adequacy of treatment
- "diagnosis" of EIB that is not proven via testing or has + bronchodilator response should raise concern for other etiology (eg cardiac)



GI/GU

BONE AND JOINT QUESTIONS	Yes	No
14. Have you ever had a stress fracture or an injury to a bone, muscle, ligament, joint, or tendon that caused you to miss a practice or game?		
15. Do you have a bone, muscle, ligament, or joint injury that bothers you?		
MEDICAL QUESTIONS	Yes	No
16. Do you cough, wheeze, or have difficulty breathing during or after exercise?		
17. Are you missing a kidney, an eye, a testicle (males), your spleen, or any other organ?		
18. Do you have groin or testicle pain or a painful bulge or hernia in the groin area?		
19. Do you have any recurring skin rashes or rashes that come and go, including herpes or methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)?		
20. Have you had a concussion or head injury that caused confusion, a prolonged headache, or memory problems?		
21. Have you ever had numbness, had tingling, had weakness in your arms or legs, or been unable to move your arms or legs after being hit or falling?		
22. Have you ever become ill while exercising in the heat?		
23. Do you or does someone in your family have sickle cell trait or disease?		
24. Have you ever had or do you have any problems with your eyes or vision?		

- Absence of paired organ is rarely disqualifying
 - Individualized assessment and consider additional protective gear
- Abdominal or inguinal hernia on exam should not limit participation
 - Fix if symptomatic
- Organomegaly should prompt evaluation prior to clearance
- *Recommend additional GI/GU questions*
 - *Bowel and bladder patterns*
 - *Any evidence of bleeding*
- GU exam in private, also allows for further GU related questions

DERMATOLOGIC

BONE AND JOINT QUESTIONS	Yes	No
14. Have you ever had a stress fracture or an injury to a bone, muscle, ligament, joint, or tendon that caused you to miss a practice or game?		
15. Do you have a bone, muscle, ligament, or joint injury that bothers you?		
MEDICAL QUESTIONS	Yes	No
16. Do you cough, wheeze, or have difficulty breathing during or after exercise?		
17. Are you missing a kidney, an eye, a testicle (males), your spleen, or any other organ?		
18. Do you have groin or testicle pain or a painful bulge or hernia in the groin area?		
19. Do you have any recurring skin rashes or rashes that come and go, including herpes or methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)?		
20. Have you had a concussion or head injury that caused confusion, a prolonged headache, or memory problems?		
21. Have you ever had numbness, had tingling, had weakness in your arms or legs, or been unable to move your arms or legs after being hit or falling?		
22. Have you ever become ill while exercising in the heat?		
23. Do you or does someone in your family have sickle cell trait or disease?		
24. Have you ever had or do you have any problems with your eyes or vision?		

- Infectious skin conditions are a common rationale for TEMPORARY exclusion from sport
- Most common
 - Molluscum contagiosum, warts, impetigo, tinea gladiatorum, MRSA
- Particularly for sports with frequent skin to skin contact and shared equipment
 - Wrestling, football, rugby, martial arts
- Also pay attention to non-sport environment, eg time in shared locker room to prevent widespread outbreaks



MUSCULOSKELETAL

Neurological			
MUSCULOSKELETAL		NORMAL	ABNORMAL FINDINGS
Neck			
Back			
Shoulder and arm			
Elbow and forearm			
Wrist, hand, and fingers			
Hip and thigh			
Knee			
Leg and ankle			
Foot and toes			
Functional			
<ul style="list-style-type: none"> • Double-leg squat test, single-leg squat test, and box drop or step drop test 			

- Screen for unresolved MSK injuries
- Stress fractures flag for RED-S
- ROM for all joints
- Neuro based strength
- LE functional tests (eg duck walk)
- Focused MSK exams depending on sport
 - Shoulder/elbow for throwing athlete
 - Knee/hip/ankle for soccer athletes
 - Back for rowing athletes

BONE AND JOINT QUESTIONS	Yes	No
14. Have you ever had a stress fracture or an injury to a bone, muscle, ligament, joint, or tendon that caused you to miss a practice or game?		
15. Do you have a bone, muscle, ligament, or joint injury that bothers you?		
MEDICAL QUESTIONS	Yes	No
16. Do you cough, wheeze, or have difficulty breathing during or after exercise?		
17. Are you missing a kidney, an eye, a testicle (males), your spleen, or any other organ?		
18. Do you have groin or testicle pain or a painful bulge or hernia in the groin area?		
19. Do you have any recurring skin rashes or		

MENTAL HEALTH

Do you have any allergies? If yes, please list all your allergies (ie, medicines, pollens, food, stinging insects).

Patient Health Questionnaire Version 4 (PHQ-4)

Over the last 2 weeks, how often have you been bothered by any of the following problems? (Circle response.)

	Not at all	Several days	Over half the days	Nearly every day
Feeling nervous, anxious, or on edge	0	1	2	3
Not being able to stop or control worrying	0	1	2	3
Little interest or pleasure in doing things	0	1	2	3
Feeling down, depressed, or hopeless	0	1	2	3

(A sum of >3 is considered positive on either subscale [questions 1 and 2, or questions 3 and 4] for screening purposes.)

- PHQ-4 now included in PPE monograph
 - Score of >3 for EITHER 1+2 or 3+4 considered a positive screen
- Consider input of parent/guardian as well as private conversation
- Sports can be protective but also a major source of stress and pressure
- Increasingly from very young ages
- Other considerations
 - ADHD, substance abuse, bullying, sexual abuse, sleep disturbances
- Important to have referral network established.

FEMALE ATHLETES

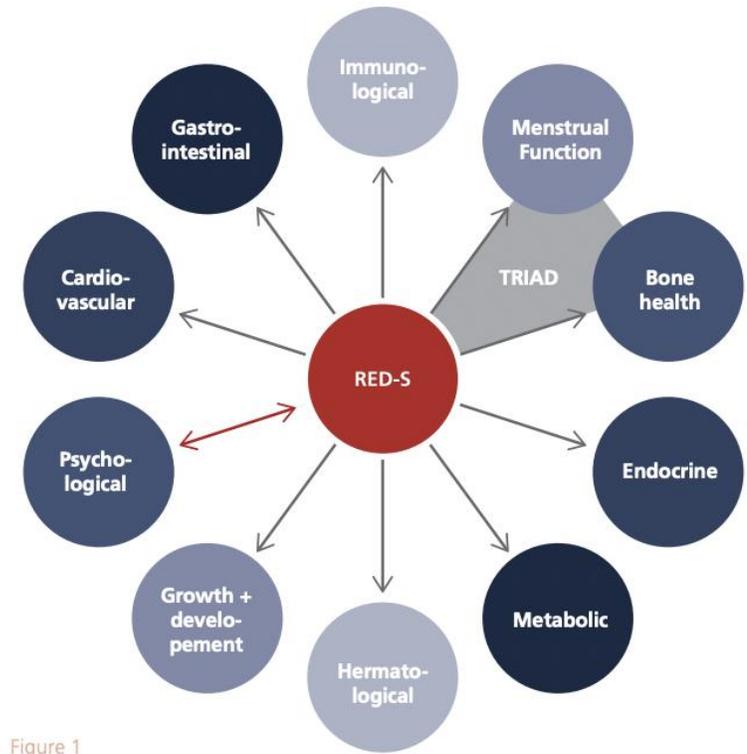
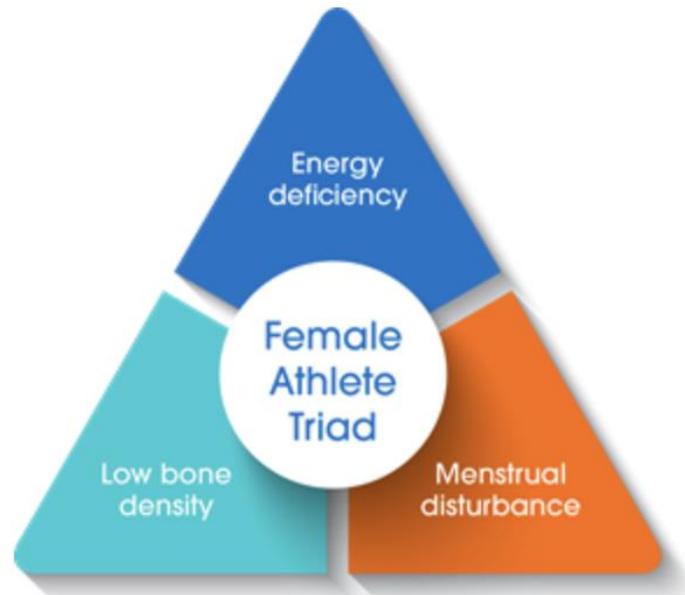


Figure 1

- Traditional female athlete triad transitioning to RED-S
 - Relative Energy Deficiency in Sport
- Acknowledgement that any athlete can have energy deficiency and associated physiologic changes
- Further screening/evaluation tools if concern noted on PPE
- Evaluation and management should be with multi-disciplinary team
 - Particularly important for eligibility determinations

RED-S CAT™

Relative Energy Deficiency in Sport (RED-S)
Clinical Assessment Tool (CAT)

For use by medical professionals only



TRANSGENDER ATHLETES

- Rapidly evolving/changing approach to transgender athletes
- Highly variable rules depending on sport, governing body, local/state jurisdiction
- Recent trend has been:
 - Trans male athletes may compete on men's teams
 - Trans female athletes may compete on women's teams with certain length of testosterone suppression or below certain serum testosterone level
- Very recently changed by International Olympic Committee
- Recommend consultation with a sports medicine physician knowledgeable about the sports athlete is participating in

International Olympic Committee issues new guidelines on transgender athletes

Athletes will no longer be required to undergo “medically unnecessary” hormone treatments to compete, the IOC said.

COVID-19

Sex assigned at birth (F, M, or intersex): _____ How do you identify your gender? (F, M, or other): _____

Have you had COVID-19? (check one): Y N

Have you been immunized for COVID-19? (check one): Y N If yes, have you had: One shot Two shots

List past and current medical conditions. _____

COVID-19 VACCINE

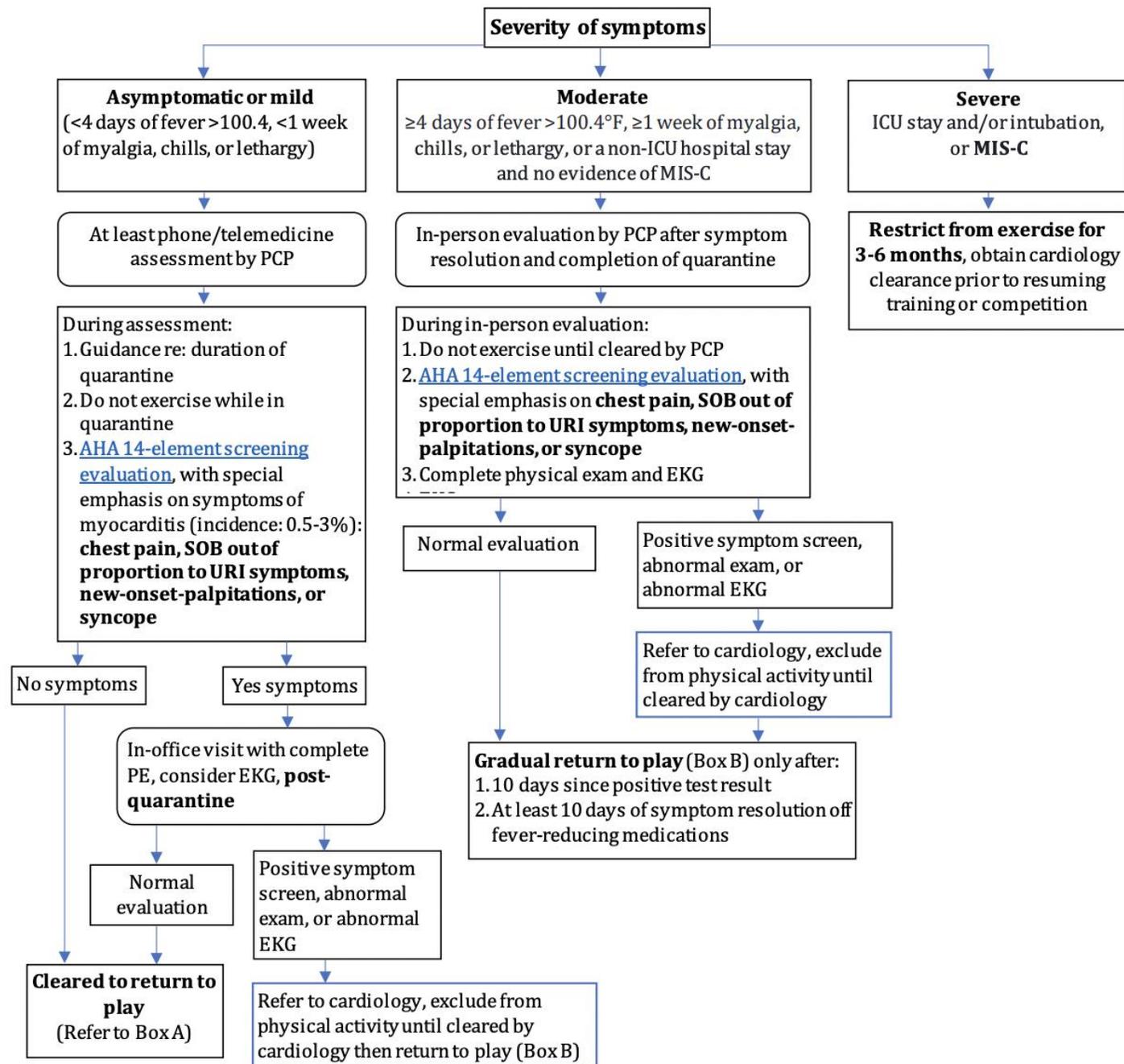
Previously received COVID-19 vaccine: Y N

Administered COVID-19 vaccine at this visit: Y N If yes: First dose Second dose

MEDICAL NORMAL ABNORMAL FINDINGS

- PPE forms updated (interim nature) to ask COVID-19 history and vaccination questions.
 - Post-COVID risk primarily of myopericarditis (0.5-3%)
 - Recommended PCP evaluation (PE and ECG) if:
 - Asymptomatic or mild COVID symptoms with cardiac symptoms on return to exercise (chest pain, DOE out of proportion, new palpitations or syncope)
 - Moderate or severe COVID symptoms
 - If symptoms, exam, ECG concerning recommend Cardiology consult
 - Consider echo +/- cardiac MRI
- ECG finding suggestive of myocarditis: ***

COVID-19



ATHLETES WITH DISABILITIES

■ PREPARTICIPATION PHYSICAL EVALUATION

ATHLETES WITH DISABILITIES FORM: SUPPLEMENT TO THE ATHLETE HISTORY

Name: _____ Date of birth: _____

1. Type of disability:		
2. Date of disability:		
3. Classification (if available):		
4. Cause of disability (birth, disease, injury, or other):		
5. List the sports you are playing:		
	Yes	No
6. Do you regularly use a brace, an assistive device, or a prosthetic device for daily activities?		
7. Do you use any special brace or assistive device for sports?		
8. Do you have any rashes, pressure sores, or other skin problems?		
9. Do you have a hearing loss? Do you use a hearing aid?		
10. Do you have a visual impairment?		
11. Do you use any special devices for bowel or bladder function?		
12. Do you have burning or discomfort when urinating?		
13. Have you had autonomic dysreflexia?		
14. Have you ever been diagnosed as having a heat-related (hyperthermia) or cold-related (hypothermia) illness?		
15. Do you have muscle spasticity?		
16. Do you have frequent seizures that cannot be controlled by medication?		

Explain "Yes" answers here.

Please indicate whether you have ever had any of the following conditions:

	Yes	No
Atlantoaxial instability		
Radiographic (x-ray) evaluation for atlantoaxial instability		
Dislocated joints (more than one)		
Easy bleeding		
Enlarged spleen		
Hepatitis		
Osteopenia or osteoporosis		
Difficulty controlling bowel		
Difficulty controlling bladder		
Numbness or tingling in arms or hands		
Numbness or tingling in legs or feet		
Weakness in arms or hands		
Weakness in legs or feet		
Recent change in coordination		
Recent change in ability to walk		
Spina bifida		
Latex allergy		

Explain "Yes" answers here.

I hereby state that, to the best of my knowledge, my answers to the questions on this form are complete and correct.

- Might not replace team or event specific forms (eg Special Olympics)

MEDICAL ELIGIBILITY

■ PREPARTICIPATION PHYSICAL EVALUATION

MEDICAL ELIGIBILITY FORM

Name: _____ Date of birth: _____

- Medically eligible for all sports without restriction
- Medically eligible for all sports without restriction with recommendations for further evaluation or treatment of

- Medically eligible for certain sports

- Not medically eligible pending further evaluation
- Not medically eligible for any sports

Recommendations: _____

MEDICAL ELIGIBILITY

■ PREPARTICIPATION PHYSICAL EVALUATION

MEDICAL ELIGIBILITY FORM

Name: _____ Date of birth: _____

Medically eligible for all sports without restriction **Overwhelming majority of evaluations**

Medically eligible for all sports without restriction with recommendations for further evaluation or treatment of
Concern raised on PPE that does not impact sports participation

Medically eligible for certain sports

Formal diagnosis with specific sports restriction

Not medically eligible pending further evaluation **True red flag on PPE that would impact health**

Not medically eligible for any sports **Should essentially never be used**

Recommendations: _____

OBJECTIVES

- Describe the purpose of the Preparticipation Physical Evaluation
- Describe the differences between the PPE 5th edition and prior versions of the PPE
- List the “red flag” items of the PPE-5 that would necessitate holding from participation
- Understand the impact of COVID-19 on the PPE

PREPARTICIPATION PHYSICAL EVALUATION 5th EDITION

Henry Pelto, MD

Primary Care Sports Medicine
Virginia Mason Franciscan Health
Henry.Pelto@virginiamason.org
206-235-6314

