

# Post-COVID Algorithm

## Return to Play

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## Disclosures

- No financial interests or conflicts of interest related to this talk
- Full disclosures:
  - Ossur Americas AMSSM Fellow Grant (2020-2021)



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## Goals and Objectives

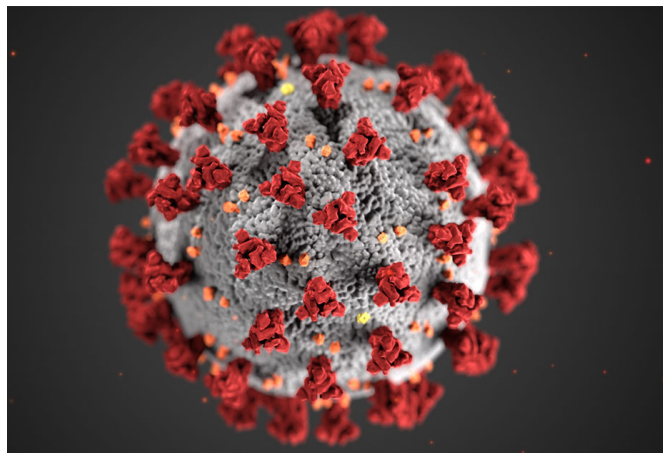
- Review of SARSCoV2
  - Establish basic understanding of the disease
- Return to Play guidelines
  - Discuss the importance of consideration for further evaluation and graded return to play



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## COVID-19

- What? Coronavirus
  - SARSCoV2
- Where?
  - Wuhan, China
- When?
  - Late 2019
  - Global spread early 2020

Image: <https://www.cdc.gov/dotw/covid-19/index.html>

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# COVID -19

COrona Vlrus Disease - 19

- SARSCoV2 Respiratory infection
- Spread
  - Respiratory Droplets
- Incubation period of about 14 days



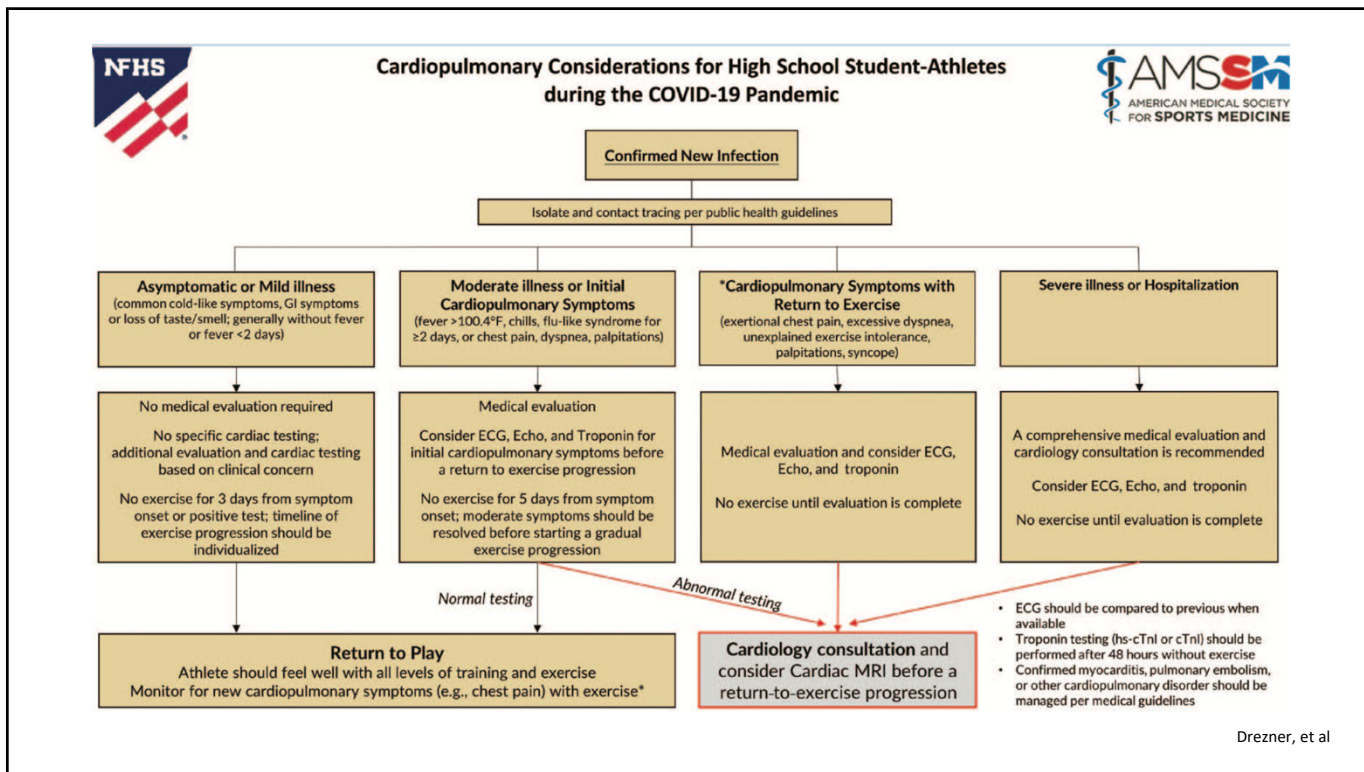
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# Myocarditis

- Inflammation of the heart muscle
- Known association as a possible cause of Sudden Cardiac Death (SCD)
- Potential for cardiac arrhythmia due to scarring/inflammation



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## Cardiopulmonary Considerations for High School Student-Athletes During the COVID-19 Pandemic: Update to the NFHS-AMSSM Guidance Statement

Endorsed by the American Medical Society for Sports Medicine (AMSSM) and National Federation of State High School Associations (NFHS)

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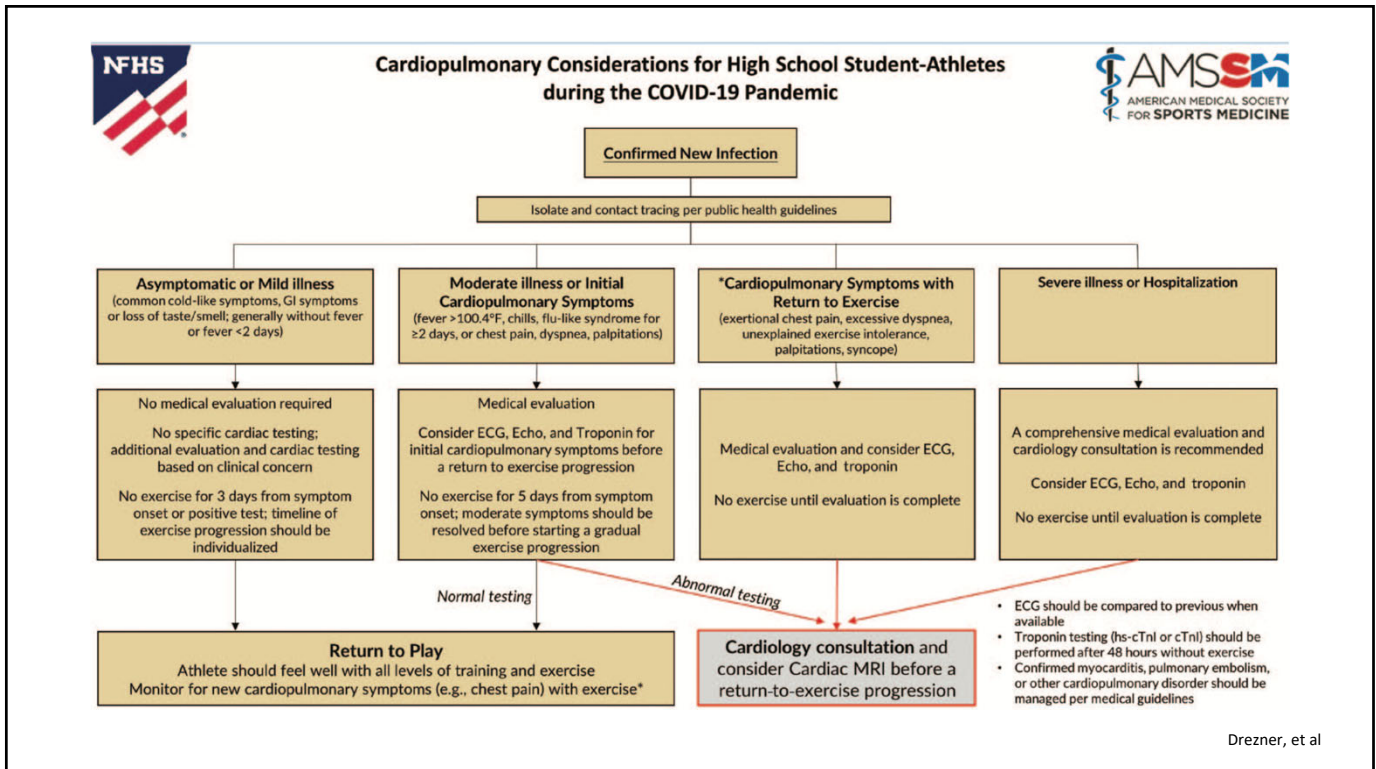
# Asymptomatic or Mild

- Mild symptoms
  - Common cold-like- without fever
  - Loss of taste/smell
  - GI symptoms
- Generally do not require further cardiac evaluation prior to return to play



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## Moderate or Initial Cardiopulmonary

- Fever
  - Tmax >100.4F
- Systemic Symptoms (flu-like)
- Chills
- Chest Pain
- Palpitations
- Dyspnea

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## Moderate or Initial Cardiopulmonary

### Evaluation

- Evaluation by physician is recommended for moderate symptoms and/or cardiopulmonary symptoms during infection
- Consideration of additional tests with initial cardiopulmonary symptoms during initial infection
  - EKG
  - Troponin
  - Echocardiogram

POSITIVE TESTING: Cardiac MRI and Cardiology consult recommended

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## Severe Symptoms/Hospitalization

Cardiology consult recommended PRIOR TO RETURN TO PLAY

Consider: EKG, Troponin, Echo, Cardiac MRI

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## Return to Play

- Mild
  - 3 days from onset of symptoms or positive test
- Moderate
  - 5 days from onset of symptoms or positive test
  - MODERATE SYMPTOMS ARE IMPROVING
  - \*\*\* Fever free off antipyretics for 24 hours \*\*\*

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## Return to Play- MSHSL

05/03/2022

- Days 0-5
    - No participation
  - Days 6-10: Masked\* return to practice and competition\*\*
    - School must have adopted day 6 return recommendations by CDC
- AND
- Lessening symptoms and fever free for 24 hours off antipyretics
- \*if negative PCR/antigen test, no mask required
- \*\* except pole vault and synchronized swimming
- Day 11- improving symptoms, >10 d since positive test, no fever for 24hours



MSHSL COVID Guidance (Updated May 3, 2022)

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## Return to Play

How?

- Graded
  - Progressive intensity
  - Intensity level should be predetermined for that day
- Monitored
  - Should have their return activity monitored
  - Ideally monitored by healthcare professional (AT, PT, RN, MD/DO, etc) that has life support training



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# Return to Play

## MSHSL Protocol

- **Stage 1:** (2 Days Minimum) Light Activity (Walking, Jogging, Stationary Bike) for 15 minutes or less at intensity no greater than 70% of maximum heart rate. NO resistance training.
- **Stage 2:** (1 Day Minimum) Add simple movement activities (running activities) for 30 minutes or less at intensity no greater than 80% of maximum heart rate
- **Stage 3:** (1 Day Minimum) Progress to more complex training for 45 minutes or less at intensity no greater than 80% maximum heart rate. May add light resistance training.
- **Stage 4:** (2 Days Minimum) Normal Training Activity for 60 minutes or less at intensity no greater than 80% maximum heart rate
- **Stage 5:** (1 Day Minimum) Return to Full Training Sessions without restrictions or limitations on intensity or duration.
- **Stage 6:** Medically ready for Full Participation in ALL Sports Activities (Minimum duration 7-days)

MSHSL COVID Graduated Return to Sport Form



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# Symptoms During RTP

- Athletes who develop cardiopulmonary symptoms during return to play/exercise warrant further evaluation
  - EKG, Troponin, Echo
  - Cardiology consult/ Cardiac MRI



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## Pre-Participation Exam Considerations

- History of COVID?
  - Symptoms? Asymptomatic?
    - Mild, moderate, severe disease?
  - Ongoing concerns during exercise?
  
- Infections >3 months prior likely do not require additional evaluation



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