



Cardiac Screening for Pediatric Athlete with Suspected or Confirmed COVID-19 Infection

Athletes and COVID-19 Care Assessment:

ATHLETES UNDER 12 YEARS OF AGE

Asymptomatic/Mild Symptoms

(No fever and/or less than 3-5 days of symptoms)

- No exercise for 14 days from symptom onset or positive test; under parental/clinical observation
- Consider medical evaluation for any concerns prior to return to activity; if concerns obtain an ECG
- Gradual return to play while observing for cardiac symptoms*

Moderate Symptoms

(Fever, and/or more than 5 days of symptoms, requiring bed rest)

- No exercise or sport until evaluated by physician
- Gradual return to play to observe for cardiac symptoms*
- Consider ECG with any cardiac symptoms*, physical exam findings OR if participates in sports more than two (2) days per week

Severe Symptoms

(Hospitalization, MIS-C, ongoing symptoms for more than 14 days)

- Evaluate by pediatric Cardiology prior to return to exercise, competition or sports participation
- Consider ECG, Echo, +/- Cardiac MRI
- Consider Holter Monitor/Exercise stress test
 - » If abnormal†, follow return to sport guidelines for myocarditis/pericarditis or abnormality present on work up
 - » If normal, gradual return to play while observing for cardiac symptoms*

Our knowledge of COVID-19 infections is rapidly changing and the effects in the pediatric population are largely unknown.

In the adult population, COVID-19 infections appear to affect the heart at a higher rate than other viruses, while in the pediatric population, the virus can cause multi-system inflammatory syndrome (MIS-C) involving the heart.

Due to the lack of evidence for cardiac injury from COVID-19 infections in the pediatric population and the low number of pediatric cases, recommendations are made from expert opinion from the sports medicine, infectious disease and cardiology departments and are subject to change.

The process in the right column is intended for COVID-19 positive patients and those who have presumed positive infections. Growing athletes must be asymptomatic (no fever equal to or higher than 100.4 degrees for 24 hours without fever-reducing medications, resolution of symptoms such as cough, shortness of breath, sore throat, etc.); AND be at least 10 days since the initial onset of their symptoms; OR have been asymptomatic throughout the entire 14 days of quarantine.

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* Cardiac symptoms include: shortness of breath, shortness of breath with activity, chest pain, palpitations, fatigue, decreased exercise performance or tolerance

† ECG Changes include: Diffuse ST elevation, ST depression, T wave inversion, pathologic Q waves and PR depression

