

TITLE	Cardiac testing of Montana State University student-athletes after COVID-19 infection		
TODAY'S DATE	July 10, 2020		
SECTION	<input type="checkbox"/> Organization Wide <input type="checkbox"/> Emergency Department <input type="checkbox"/> Inpatient <input type="checkbox"/> Nursing	<input type="checkbox"/> PPE <input type="checkbox"/> Surgery <input checked="" type="checkbox"/> Ambulatory <input type="checkbox"/> Medical staff [physicians and advance care practitioners]	<input type="checkbox"/> OB/GYN

APPLICABLE LOCATIONS	<input type="checkbox"/> All Bozeman Health locations <input checked="" type="checkbox"/> Bozeman Health Deaconess Hospital <input type="checkbox"/> Big Sky Medical Center	<input type="checkbox"/> Belgrade Clinic + UrgentCare <input type="checkbox"/> Hillcrest Senior Living <input type="checkbox"/> b2 UrgentCare <input type="checkbox"/> b2 MicroCare
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CONTRIBUTORS	K. Reising, J. Rasch, B. Erb
APPROVED BY	K. Kujawa, IC
APPROVAL DATE	July 10, 2020

**PURPOSE:**

To evaluate for cardiac related complications of Montana State University student athletes with known or expected COVID-19 infection.

**POLICY/PROTOCOL:**

The COVID-19 pandemic has halted nearly all-formal participation in sport and exercise. Organized sport at the collegiate level is to gradually begin starting June 1st 2020. Significant cardiac morbidity has been observed among hospitalized patients with COVID-19, including cardiomyopathy, arrhythmias, cardiogenic shock, heart failure, demand ischemia, and myocarditis. Up to 25% of hospitalized COVID-19 patients, experience significant cardiac dysfunction manifested by arrhythmia and left ventricular dysfunction, compared to about 1% prevalence of cardiac involvement in non-COVID-19 acute viral illness. There is a paucity of data on the incidence of cardiac injury in non-hospitalized patients with COVID-19 infection. There are expert opinion recommendations on evaluation of competitive athletes with COVID-19.

The below table outlines clinical scenarios and how student-athletes will be evaluated for cardiac complications as well as return to sport/activity. This policy is made considering the currently available expert opinion as listed in Notes.

Clinical scenario	Recommended assessment	Return to activity/sport
Athletes who are COVID-19 negative or without clinical suspicion for COVID-19 and are asymptomatic	<ul style="list-style-type: none"> <li>Daily monitoring for development of symptoms as per athletic department policy</li> </ul>	<ul style="list-style-type: none"> <li>No limitations</li> </ul>
Athletes with prior asymptomatic infection as confirmed by testing (ie, surveillance testing)	<ul style="list-style-type: none"> <li>Focused medical history and physical examination for cardiac complications</li> </ul>	<ul style="list-style-type: none"> <li>Rest/no exercise for 2 weeks from positive test result</li> <li>Graded return to activity under supervision of health care team when deemed clinically appropriate</li> </ul>
Athletes with a history of mild	<b>During symptomatic period</b>	<ul style="list-style-type: none"> <li>Rest/no exercise while</li> </ul>

illness (non-hospitalized) related to confirmed or suspected COVID-19	<ul style="list-style-type: none"> <li>• Rest/no exercise</li> <li>• Monitor for develop of or worsening of cardiac complications</li> </ul> <b>After symptomatic period and end of self-isolation period</b> <ul style="list-style-type: none"> <li>• Focused medical history and physical examination for cardiac complications</li> <li>• Perform 12-lead ECG and troponin</li> <li>• Echocardiography may also be performed on selected patients after evaluation by a team physician</li> <li>• If any of the above results are abnormal or change from baseline, consult cardiology for consideration of additional testing</li> </ul>	symptomatic <ul style="list-style-type: none"> <li>• At least 2 weeks of rest after symptom resolution</li> <li>• Graded return to activity under supervision of health care team, after evaluation by health care team and when deemed clinically appropriate after cardiac evaluation</li> </ul>
Athletes with a history of moderate to severe illness (hospitalized) related to confirmed or suspected COVID-19	During hospitalization to consider evaluation for cardiac involvement with laboratory testing, 12-lead ECG, echocardiography, exercise testing, and/or rhythm monitoring, per Bozeman Health protocols.	<ul style="list-style-type: none"> <li>• Rest/no exercise while symptomatic</li> <li>• At least 2 weeks of rest after symptom resolution</li> <li>• Graded return to activity under supervision of health care team, after evaluation by health care team and when deemed clinically appropriate after cardiac evaluation</li> </ul>

**NOTES:**

Phelan D, Kim JH, Chung EH. A Game Plan for the Resumption of Sport and Exercise After Coronavirus Disease 2019 (COVID-19) Infection. JAMA Cardiol. Published online May 13, 2020. doi:10.1001/jamacardio.2020.2136

**OTHER POLICIES/PROTOCOLS TO REFERENCE:**
**SCOPE:**

We anticipate these adjustment to be temporary and reserve the right to revise or discontinue these adjustments with or without notice depending on the current understanding and/or business needs of Bozeman Health relating to COVID-19.