

Graduated Return to Play Progression for Aerobic Sports post-COVID Infection

*RTP progression begins after proper physician Clearance form has been signed and received.

*Onset of any symptoms during activity triggers a referral to a health care provider

* There should be no less than 24 hours between stages.

*Consider the need for further modification or indoor exercise if athlete has not acclimatized to heat and humidity.

*Non-aerobic sports such as golf may have abbreviated or accelerated RTP progression as approved by treating physician.

	Exertion Level	Activity Length
Stage 1	50-60% HRM Ex. Walking, stationary bike, lunges, calisthenics	20-30 minutes
Stage 2	Up to 70% HRM Ex. Light jogging alternated with walking	20 minutes
Stage 3	Up to 70% HRM Ex. Light jogging alternated with walking	30 minutes
Stage 4	Up to 80% HRM Ex. Jogging at a fast pace with interval training and/or interval calisthenics	20-30 minutes
Stage 5	Up to 80% HRM Ex. Jogging at a fast pace with interval training and/or interval calisthenics, consider sport-specific activities or non-contact practicing	30-45 minutes
Stage 6	Active training or full participation in practice (contact permitted)	45-60 minutes
Stage 7	Full participation in practice (contact permitted)	Full Practice
Stage 8	Participation in competition event	

Unless directed by treating physician, a repeat clinic visit following the graduated progression is not required.

Athletes who experienced hospitalization associated with COVID-19 or who experienced a protracted recovery are considered higher risk and should undergo an individualized and extended RTP progression as determined by his/her medical team and the school-based AT. The recommendations and plan should consider Maron et al., *Circulation*, 2015, 132: e273-280. The health care team should be mindful of the athlete's psychological readiness to return to sport.

Patients should be carefully monitored during the graduated return to play progression. Symptoms should be assessed immediately before and following each stage. If symptoms develop during activity at any stage, the RTP progression stops and the athlete is referred to his/her healthcare provider. Any subsequent RTP will begin at Stage 1. Unless directed by treating physician, a repeat clinic visit following the graduated progression is not required.

References:

Centers for Disease Control. <https://www.cdc.gov/coronavirus/2019-ncov/index.html> Accessed October 20, 2020.

Drezner et al., *Cardiopulmonary Considerations for High School Student-Athletes during the COVID-19 Pandemic: NFHS-AMSSM Guidance Statement*, *Sports Health*, 1-3.

Elliott et al., *Infographic: Graduated return to play guidance following COVID-19 infection*. *BJSM*, June 2020.

NCHSAA Modified Sports Recommendations, October 15, 2020.

Phelen, et al., *A game plan for the resumption of sport and exercise after COVID-2019 infection*. *JAMA Cardiology*, published online May 13, 2020, E2-E2.