

Suggested Post-COVID-19 Gradual Return-to-Play Progression

The overall objective of a return-to-play (RTP) protocol is to gradually and safely increase the athlete's physical activity after an illness or injury. RTP after COVID-19 can be thought of as similar to a RTP protocol for concussion. With any viral infection, including but not limited to COVID-19, recovery from infection needs to occur. This includes resolution of symptoms, including fever, with no use of medications/treatment. Deconditioning during recovery from infection often occurs.

Prior to starting any gradual RTP, the level of severity of COVID-19 infection and necessary recovery period should be determined, along with verifying resolution of symptoms. In addition, the recommended <u>medical clearance</u> prior to gradual RTP is available in our accompanying algorithm and at <u>aap.org</u>.

Gradual RTP progression should occur **over at least 7 days**. Those who had more significant symptoms and/or a prolonged recovery from infection may experience more deconditioning and require a longer RTP period. Consideration for extending the progression should be given to athletes who experienced moderate COVID-19 symptoms as outlined above.

Below is a potential gradual RTP schedule. Gradual RTP should be adjusted based on the individual's type of previous physical activity and sport. Supervision is recommended with monitoring for any red flag symptoms. If an individual experiences any red flag symptoms, activity should be stopped and a physician notified.

| | Step 1 | Step 2 | Step 3 | Step 4 | Step 5 | Step 6 |
|---------------------------------------|--|---|--|----------------------------|--|-----------------------------|
| Duration | Over 1-2 days | At least 1 day | At least 1 day | Over 1-2 days | At least 1 day | |
| Type of activity | Light | Increase frequency | Increase duration and complexity | Increase intensity | Participate in usual sport-specific activities | Fully return to sport |
| Examples of exercise allowed | Walking, Elliptical, Stationary Bike at low intensity No weight lifting | Jogging, Running Drills, Stationary Bike at increased intensity, Jump Rope | Sport-specific drills, more complex drills Light weight lifting can start | Normal practice activities | Complete practice | |
| Time | 15 minutes | 30 minutes | 45 minutes | 60 minutes | Entire practice | |
| % Heart Rate Max | <70% | <80% | <80% | <80% | | |

Adapted from Elliott N, et al, infographic, British Journal of Sports Medicine, 2020

References:

- 1. American Academy of Pediatrics. (Nov. 2020). COVID-19 Interim Guidance: Return to Sports. Retrieved from https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-interim-guidance-return-to-sports/
- 2. Elliott, N., Martin, R., Heron, N., Elliott, J., Grimstead, D., & Biswas, A. (June 2020). Infographic. Graduated return to play guidance following COVID-19 infection. *British Journal of Sports Medicine*. https://doi.org/10.1136/bjsports-2020-102637

Recommendations based on expert opinions, dated Dec. 8, 2020*. Also see our:

- Recommendations for Primary Care Providers Regarding Post-COVID-19 Return-to-Play (RTP) for Pediatric Athletes & Patients, with references and contributors
- Return-to-Play (RTP) for Pediatric Athletes & Patients ALGORITHM

^{*}Recommendations are subject to change – see www.mottchildren.org/COVIDUpdate for updates and additional information.