

Graduated Return to Play (GRTP)

Athletes Returning to Play after Mild COVID-19 Illness



Date Month/Day	Stage	Day	Amount of Allowed Practice Time	Recommended Activity	% Maximum Heart Rate < 18 years of age: 200 = max HR > 18 years of age: 220-age = max HR
Date Released:	0	COVID-19 isolation clearance from local health department (<i>10 days have passed from date of first symptom, all symptoms improving, 24 hours symptom-free off fever-reducing medications</i>) AND return to play clearance from physician (<i>PCP for mild/moderate symptoms, cardiologist for severe symptoms</i>) AND athlete is asymptomatic when performing normal activities of daily living.			
	1	Days 1 and 2	< 15 min	Light activity (<i>walking, light jogging, stationary bike</i>). No resistance training.	< 70% (140 bpm)
	2	Day 3	< 30 min	Add simple movement activities (<i>e.g., running drills</i>). No resistance training.	<80% (160 bpm)
	3	Day 4	< 45 min	Progress to more complex training. May add light resistance training.	<80% (160 bpm)
	4	Days 5 and 6	< 60 min	Normal training activity.	<80% (160 bpm)
	5	Day 7	Entire practice/game	Return to full activity/participation including games/competitions.	100% (200 bpm)

- Some athletes take more than three weeks to recover.
- If symptoms (*including excessive fatigue*) start or reoccur while going through GRTP, consider returning to the previous stage and progress again after a minimum of 24 hours rest without symptoms. Reevaluation may be necessary.
- Athletes diagnosed with COVID-19 and who have medical conditions such as diabetes, cardiovascular disease or renal disease may need extended rest or testing prior to commencing GRTP.

Adapted from American Academy of Pediatrics guidelines and British Journal of Sports Medicine

- <https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-interim-guidance-return-to-sports/>
- <https://bjsm.bmj.com/content/54/19/1174>
- <https://www.acc.org/latest-in-cardiology/articles/2020/07/13/13/37/returning-to-play-after-coronavirus-infection>
- <https://jamanetwork.com/journals/jamacardiology/fullarticle/2772399>
- <http://dph.illinois.gov/covid19/community-guidance/sports-safety-guidance>
- <https://www.ihsa.org/documents/CovidGuidelines/Return%20to%20Play%20Procedures%20After%20COVID19.pdf>

Mild

All children and adolescents who test positive for SARS-CoV-2 should notify their pediatrician. For a child or adolescent who is SARS-CoV-2-positive who is either asymptomatic or mildly symptomatic (*<4 days of fever >100.4°F, <1 week of myalgia, chills and lethargy*) a phone or telemedicine visit with the pediatrician is recommended, at a minimum, so appropriate guidance can be given to the family.

Moderate

For those with moderate symptoms of COVID-19 (*≥4 days of fever >100.4°F, ≥1 week of myalgia, chills or lethargy, or a non-ICU hospital stay and no evidence of multisystem inflammatory syndrome in children [MIS-C]*), an evaluation by their primary care physician (PCP) is recommended.

If cardiac workup is negative, gradual return to physical activity may be initiated after 10 days have passed from the date of the positive test result, and a minimum of 10 days of symptom resolution has occurred off fever-reducing medicine.

Severe

For children and adolescents with severe COVID-19 symptoms (*ICU stay and/or intubation*) or MIS-C, it is recommended they be restricted from exercise for a minimum of 3 to 6 months and obtain cardiology clearance prior to resuming training or competition.

Return to Play

All children younger than 12 years may progress back to sports/physical education classes according to their own tolerance. For children and adolescents 12 years and older, a graduated return-to-play protocol is recommended. The progression should be performed over the course of a seven-day minimum. Consideration for extending the progression should be given to children and adolescents who experienced moderate COVID-19 symptoms, as outlined above.

The following progression was adapted from Elliott N, et al, infographic, *British Journal of Sports Medicine*, 2020:

Stage 1	Day 1 & 2 (2 days min.)	15 minutes or less	Light activity (<i>walking, jogging, stationary bike</i>), intensity no greater than 70% of maximum heart rate. NO resistance training.
Stage 2	Day 3 (1 day min.)	30 minutes or less	Add simple movement activities (<i>e.g., running drills</i>), intensity no greater than 80% of maximum heart rate.
Stage 3	Day 4 (1 day min.)	45 minutes or less	Progress to more complex training, intensity no greater than 80% maximum heart rate. May add light resistance training.
Stage 4	Day 5 & 6 (2 days min.)	60 minutes	Normal training activity, intensity no greater than 80% maximum heart rate.
Stage 5	Day 7	Return to full activity/participation (<i>i.e., contests/competitions</i>)	