



COVID-19 and Sport Guidelines



This guide emanates from a webinar “Not Playing Games: Implications of COVID-19 for Sport” hosted by the Wits Institute for Sport and Health (WISH).

The webinar is accessible at <https://youtu.be/6jXHDQmx0gE>

These are guidelines focusing on exercise in the context of COVID-19. As with any new and evolving disease, our understanding is advancing as we learn more about the disease and these recommendations may change. Until herd immunity¹ is obtained (either through a vaccine being developed or sufficiently large numbers of the population being exposed to the virus) our hygiene and sports habits will have to change.

DOMAIN	RECOMMENDATION
DEFINITIONS The Virus: SARS-CoV2 (Severe Acute Respiratory Syndrome Coronavirus 2) The Disease: COVID-19 (Corona Virus Disease 2019)	Hygiene <ul style="list-style-type: none">• Regular hand washing with soap and hot water for at least 20 seconds• Use of sanitising solutions containing at least 70% alcohol• Avoid droplet spread – sneeze into flexed elbow, wear masks in public areas• Avoid sharing gym equipment

EXERCISE AND IMMUNITY

Regular, moderate exercise (3-5 times a week for 45 mins at 3-6 METs²/50-70% maximum heart rate) boosts general immunity

Sustained, prolonged high [intensity](#) exercise may temporarily lower immunity by decreasing antibodies in the airway lining and lowering the number of infection-fighting white blood cells

Abrupt leaps to a higher intensity may also compromise the immune system

Elite and well-trained athletes tolerate higher intensity [exercise](#) better without compromising immunity

RISKS OF EXERCISING WHEN SYMPTOMATIC OR ILL

Regular Exercisers

- Try and be [active](#) for some period in every hour during the day
- Try and include some aerobic, strength and flexibility [components](#) to your week's routine
- Recommended [exercises](#) include walking, cycling, light weights circuit and aerobics
- Maintain an [exercise routine](#) that includes more intense exercise on 2 days, some easier sessions and recovery

School and Club Athletes

- Try and exercise as frequently as you would during a normal week's sporting routine
- Vary the exercise as described above
- If possible, include a skills component related to your specific sport e.g. hockey skills, reaction drills, multiple sprint tasks

Elite Athletes

- Re-periodise your training if you know when your postponed events will take place
- Readjust [training](#) goals to those that are realistic in your current environment
- Lower load (total duration and intensity) by 10% if training for an uncertain extended period
- Maintain healthy eating patterns and adjust calorie and fluid intake according to your adjusted training programme and energy expenditure
- A regular eating and [sleep pattern](#) (at least 7 hours) may help the immune system to cope
- Regular exposure to natural light and sun will help with regulating your circadian rhythm and Vitamin D production
- No vitamins or supplements are proven to prevent SARS-CoV2 infection, but the following may help in mitigating the effects of the disease: [Vitamin C](#) 1g per day, [Vitamin D](#) 800-2000IU per day, [Zinc](#) 30mg per day

To the athlete

- Higher risk of progressing mild disease to severe
- Risk of heart involvement in the form of myocarditis

To others

- Due to more frequent and vigorous breathing during exercise, a greater risk of seed infection to those within 6 metres

<p>ATHLETES WHO TEST POSITIVE FOR COVID-19</p>	<ul style="list-style-type: none"> • Most young, healthy athletes may only contract a milder form of the disease lasting 5-7 days • Do not exercise while symptomatic • Strictly self-isolate at home for at least 14 days • Use paracetamol to help control fever and pain; consult your doctor before using anything else • Stay in <u>telephonic contact</u> with your doctor particularly if symptoms worsen; specifically report worsening fevers, severe fatigue, shortness of breath, difficulty breathing and confusion⁴ • If you have an existing lung condition such as asthma, seek advice as to how your treatment should be modified • Ask about <u>resources</u> to support you if you are feeling anxious, down or depressed
<p>RESUMING TRAINING AFTER INFECTION</p>	<ul style="list-style-type: none"> • Resume exercise 21 days after the first symptoms appeared, or 10 days after the last symptoms disappeared • Competitive athletes should seek further medical advice regarding health and fitness assessments when recovered; these include blood, heart and lung tests
<p>RESUMING TRAINING FOR HEALTHY ATHLETES AFTER LOCKDOWN</p>	<ul style="list-style-type: none"> • Enter “pre-season mode”, the duration of which will depend on the length of time exercising sub-optimally and fitness levels post-lockdown³ • To avoid injury, scientifically grade your return to full training once your post-Corona schedule is known⁵
<p>ONGOING INTERVENTIONS FOR SCHOOLS AND CLUBS</p>	<ul style="list-style-type: none"> • Students should first return to class, observing social distancing, sanitising and mask-wearing before resuming a graded exercise programme on campus according to the Risk Reduction Strategy for Sport and Exercise. • Return to school/university sport should be graded with individual training occurring whilst observing an increased social distance of 6m • Full team sport participation should only follow the resumption of normal classes. • Display educational <u>posters</u>⁶ reminding people of mask wearing, social distancing, hand and respiratory hygiene • Ensure abundant and easily accessible soap, running water and alcohol-based sanitizer • Washing of hands must be encouraged regularly • Daily cleansing protocols with disinfectant must be implemented for change rooms and equipment • Wearing of <u>masks</u> in change rooms and by coaching staff should be advocated • Schools should prepare to initially have games without spectators • Athletes should complete a daily screening questionnaire.⁴ This should also include information about parents/siblings/others at home with regards to COVID19 related symptoms.

A practical way to monitor health and incorporate these training guidelines is through the **CoronaFighter Webb App** found here: <https://www.InsightFit.com>

USEFUL RESOURCES:

COVID-19 Health Guidelines

<https://www.nicd.ac.za/diseases-a-z-index/covid-19/covid-19-prevention/>

https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/summary.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fsummary.html

Understanding Exercise Intensity

<https://www.mayoclinic.org/healthy-lifestyle/fitness/in-depth/exercise-intensity/art-20046887>

Exercising During Lockdown

[https://www.wits.ac.za/media/wits-university/students/wits-sport/documents/EIM_Rx%20for%20Health%20Staying%20Active%20During%20Coronavirus%20Pandemic%20\(003\).pdf](https://www.wits.ac.za/media/wits-university/students/wits-sport/documents/EIM_Rx%20for%20Health%20Staying%20Active%20During%20Coronavirus%20Pandemic%20(003).pdf)

<https://basem.co.uk/series-of-tips-and-training-techniques-during-self-quarantine/>

https://www.discovery.co.za/vitality/vitality-home-work-out-channel?sap-outbound-id=8A0294EAE62F479E8B077CBEBBC884833B944B906&utm_source=SAPHybris&utm_medium=email&utm_campaign=1608&utm_term=VITA_TV_Newsletter_15042020_LM_WATCH%20AND%20LEARN&utm_content=EN

<https://www.mywellness.com/activateddcampus>

Higher Intensity Exercise

<https://www.wits.ac.za/media/wits-university/students/wits-sport/documents/Wits%20Sport%20April%20Fitness%20Challenge.pdf>

<https://www.olympicchannel.com/en/stories/features/detail/watch-pita-taufatofua-s-home-workouts-on-olympic-channel/>

Daily Routine – The Circadian Rhythm and Immunity

<https://theconversation.com/beyond-sanitizing-and-social-distancing-a-healthy-circadian-rhythm-may-keep-you-sane-and-increase-resilience-to-fight-covid-19-135535>

Mental Health Resources

<https://sacoronavirus.co.za/2020/04/10/covid-19-lockdown-and-your-mental-health/>

Educational Hygiene Posters

<https://jivemedia.co.za/science-spaza/haykhona-corona-spreading-the-word-not-the-virus/>

REFERENCES

1. The immunity or resistance to a particular infection that occurs in a group of people or animals when a very high percentage of individuals have been vaccinated or previously exposed to the infection. <https://www.dictionary.com/browse/herd-immunity>
2. The metabolic equivalent for task (MET) is a unit that estimates the amount of energy used by the body during physical activity, as compared to resting metabolism. i.e. Resting energy expenditure = 1 MET (Physical Activity Guidelines Committee. 2018 Physical Activity Guidelines Advisory Committee Scientific Report. U.S. Department of Health and Human Services; 2018.)
3. https://www.researchgate.net/publication/288000757_Has_the_athlete_trained_enough_to_return_to_play_safely_The_acutechronic_workload_ratio_permits_clinicians_to_quantify_a_player%27s_risk_of_subsequent_injury
4. <https://www.cebm.net/covid-19/are-there-any-evidence-based-ways-of-assessing-dyspnoea-breathlessness-by-telephone-or-video/> (accessed 20 April 2020)
5. <https://rowingaustralia.com.au/wp-content/uploads/2015/02/AIS-whitepaper-on-load.pdf> (accessed 20 April 2020)
6. <https://jivemedia.co.za/science-spaza/haykhona-corona-spreading-the-word-not-the-virus/> (accessed 20 April 2020)