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 immunity 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.

<table>
<thead>
<tr>
<th>DOMAIN</th>
<th>RECOMMENDATION</th>
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<td><strong>DEFINITIONS</strong></td>
<td><strong>Hygiene</strong></td>
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<tr>
<td>The Virus: SARS-CoV2 (Severe Acute Respiratory Syndrome Coronavirus 2)</td>
<td>• Regular hand washing with soap and hot water for at least 20 seconds</td>
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<td>The Disease: COVID-19 (Corona Virus Disease 2019)</td>
<td>• Use of sanitising solutions containing at least 70% alcohol</td>
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<td></td>
<td>• Avoid droplet spread – sneeze into flexed elbow, wear masks in public areas</td>
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<td>• Avoid sharing gym equipment</td>
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### EXERCISE AND IMMUNITY
Regular, moderate exercise (3-5 times a week for 45 mins at 3-6 METs/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.

### 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.

### RISKS OF EXERCISING WHEN SYMPTOMATIC OR ILL

#### 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.
| ATHLETES WHO TEST POSITIVE FOR COVID-19 | • 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 telephonic contact with your doctor particularly if symptoms worsen; specifically report worsening fevers, severe fatigue, shortness of breath, difficulty breathing and confusion 
• If you have an existing lung condition such as asthma, seek advice as to how your treatment should be modified  
• Ask about resources to support you if you are feeling anxious, down or depressed |
|---|---|
| RESUMING TRAINING AFTER INFECTION | • 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 |
| RESUMING TRAINING FOR HEALTHY ATHLETES AFTER LOCKDOWN | • Enter “pre-season mode”, the duration of which will depend on the length of time exercising sub-optimally and fitness levels post-lockdown 
• To avoid injury, scientifically grade your return to full training once your post-Corona schedule is known |
| ONGOING INTERVENTIONS FOR SCHOOLS AND CLUBS | • 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 posters 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 masks 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. 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](https://www.InsightFit.com)

**USEFUL RESOURCES:**

**COVID-19 Health Guidelines**

**Understanding Exercise Intensity**

**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://www.mywellness.com/activateddcampus](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.wits.ac.za/media/wits-university/students/wits-sport/documents/Wits%20Sport%20April%20Fitness%20Challenge.pdf)

**Daily Routine – The Circadian Rhythm and Immunity**

**Mental Health Resources**

**Educational Hygiene Posters**

**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](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](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)