

## **RETURN TO PLAY AFTER COVID 19 INFECTION (RTP)**

*World Triathlon Medical Committee*

Covid-19, the disease caused by SARS-CoV-2 emerged in late 2019, in the past two years has spread rapidly infecting more than 450 million people.

It caused havoc in the sporting industry leading to either a cancellation or a postponement of every major sporting event.

Given the dynamicity of the infection regarding the virus virulence and mutation, several return-to-play (RTP) protocols have been adopted worldwide to safeguard athletes.

***Athletes should follow local governmental Covid-19 guidelines either of their country of residence or of the host country, for management of symptoms including self-isolation and testing procedure.***

**This guideline represents the current recommendations for reintegration into competitive sport after recovery from COVID 19 infection (1,2,3,4,5)**

Covid-19 is a multisystem disease, that could be associated with respiratory and cardiac involvement thus influencing exercise capacity.

The risk of myocarditis exists even in asymptomatic or mildly symptomatic COVID-19 athletes and if undetected could be associated with sudden cardiac arrest.

***COVID-19 disease requires the evaluation of the athlete by a medical professional for consideration of a graduated return to play and competitive sport.*** The severity of the disease, particularly severe fatigue, appears to affect the duration of recovery. Exercise should not resume if the athlete has persistent fever, or any red flag symptoms. (See below)

Clinicians should advise patients to return to activity in a slow gradual manner.

**Mild symptoms:** anosmia, ageusia, headache, mild fatigue, mild upper respiratory tract illness, and mild gastrointestinal illness.

**Moderate symptoms:** persistent fever > 38°, chills, cough, myalgias, lethargy, dyspnea and chest tightness, SpO<sub>2</sub> >94%

- 1) **Asymptomatic athlete with positive Covid-19 test:** Training may resume after 3 days of abstinence from exercise during self-isolation; the athlete must be closely monitored throughout the RTP for the development of signs and symptoms that may be associated with Covid-19; RTP from 1 week from positive test results. Anamnesis, physical examination.
- 2) **Symptomatic athletes with mild above neck symptoms (cough, anosmia, ageusia, headache):** 5 days of self-isolation, followed by 48 hours of light activity (only after symptoms are resolved), with full resumption of activity after another 48 hours. Termination of RTP and reevaluation in case of development of red flag symptoms. Anamnesis, physical examination.

- 3) **Symptomatic athletes with below neck symptoms (including, but not limited to fever, shortness of breath, chest pain or palpitation):** Isolation with complete rest for 5 days, RTP only after the discretion of the doctor and not before 10 days from the positive test results and only after the symptoms are resolved. Anamnesis, physical examination, laboratory (differential blood count, CK, CK MB, hs-cTn, D-dimeres), resting and exercise ECG with O2 saturation, echocardiography, spirometry without abnormalities.
- 4) **Athletes with positive COVID 19 test with clinical or radiological evidence of pneumonia:** No sport for at least 4 weeks. Anamnesis, physical examination, laboratory, resting and exercise ECG, cardio pulmonary exercise test (CPX) with BGA, echocardiography, spirometry without abnormalities. Consider adding CMRI. Return to training under a doctor's supervision.
- 5) **Athletes with positive COVID-19 test with suspected or confirmed myocarditis with/without pulmonary involvement:** No sport for at least 3-6 months. Diagnostics according to "Guidelines myocarditis" and consider adding CMRI (6,7,8,9). Return to training under the supervision of a cardiologist. In case of pneumonia all the exams in the point 4 must also be performed.

## RED FLAG SYMPTOMS

### CVS Symptoms

- Dyspnea
- Unusual exercise intolerance
- Chest Pain
- Unusual heart rate or arrhythmia
- Syncope

### CNS Symptoms

- Persistent headache
- Cognitive impairment
- Fatigue
- Dizziness

## References

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