

## RETURN TO TRAINING POST-COVID-19 INFECTION

The purpose of this document is to provide clubs, coaches, parents and athletes with some general advice on athletes returning to the pool after they've had COVID 19, or more specifically Omicron.

As we all know, the Omicron strand of COVID 19 is usually a mild respiratory illness that people recover from relatively quickly. But it also has the capability to cause severe illness in two key areas:

- The risk of "Long COVID" that may impact a swimmers' quality of life and ability to participate in synchro. Medical advice is this risk can be minimised by a cautious and gradual resumption of activities.
- The very small risk of undetected damage to heart tissue or other organs.

Exercise is important for recovery from COVID, but it must be done gradually and safely. This document is designed to help you to work out with your athlete what that return should look like.

The first step is to identify what the athlete's experience of COVID was e.g. was it asymptomatic, mild, moderate or severe. This has an impact on the return to full training approach. The definition of these is as follows:

Illness severity	Definition
<b>Asymptomatic</b>	Positive COVID-19 test with no symptoms
<b>Minor</b>	Low-grade fever, cough, mild fatigue only, nasal congestion, sore throat and possibly other symptoms (eg, nausea, vomiting, diarrhoea, loss of taste & / or smell)
<b>Moderate</b>	Persistent fever (38°C or higher), persistent fatigue (at least 7 days duration), Pneumonia, chest pain not associated with cough, activity-limiting shortness of breath, swelling, palpitations, fainting/dizziness
<b>Severe</b>	Requiring hospitalization for medical treatment

Although in NZ, you are no longer required to be isolated once symptom-free and at least 7 days from the start of a COVID infection, it takes a little longer to be ready to do cardio exercise. Experience overseas suggests it may take some swimmers up to 3 weeks to recover. Before coming back to cardio training swimmers should be:

- 1) Resting for 10 days from onset of Covid-19 symptoms/ positive test
- 2) At least 7 days symptoms free (without paracetamol or other treatment)
- 3) Able to complete normal daily activities and walk 500m on the flat without fatigue

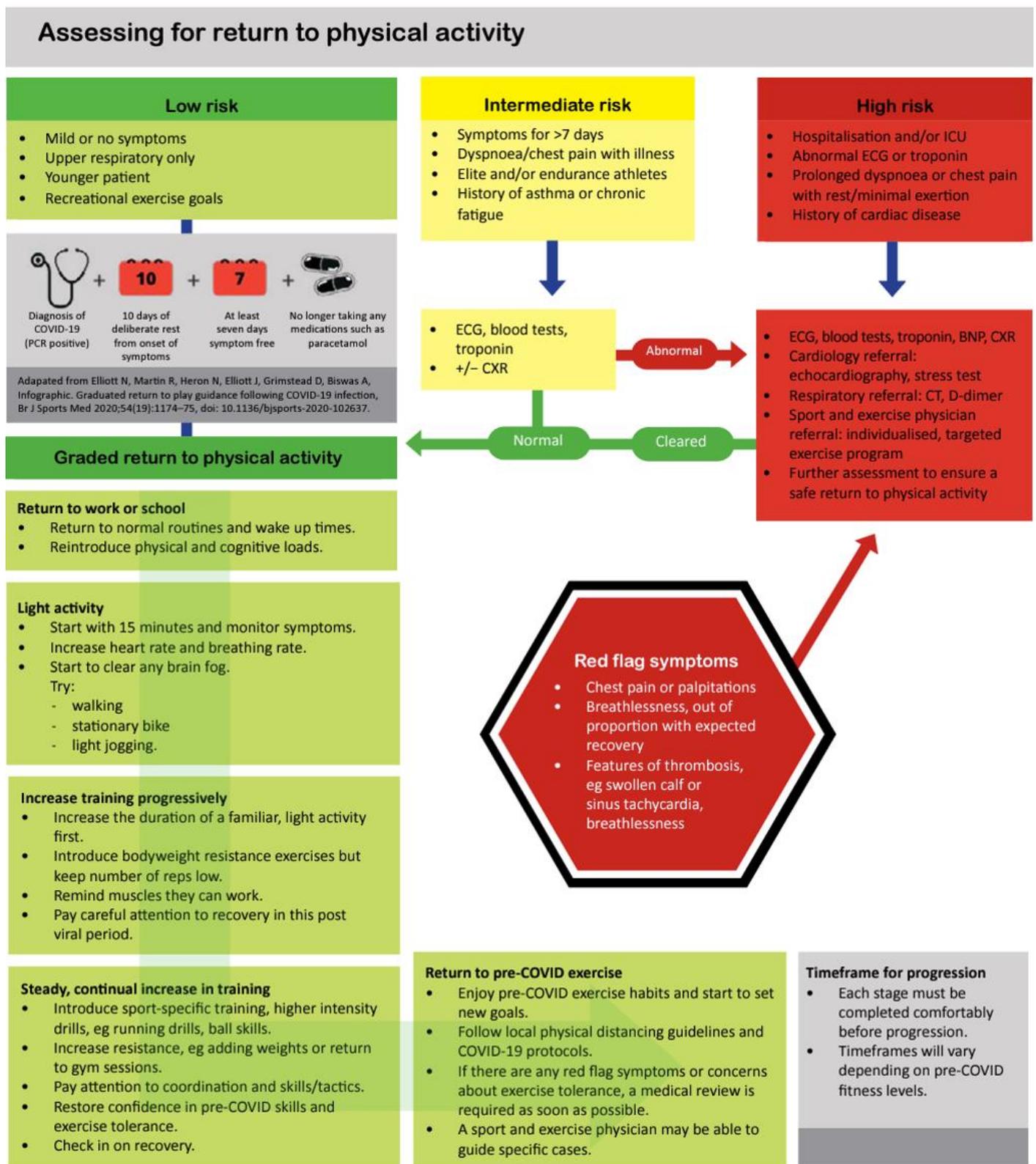
While swimmers are waiting to recover enough for cardio training, they may be able to participate in land drills, stretching, simple S & C that does not lift the heart rate, and the social aspects of club training – this needs to be led by coaches, parents and swimmers together.

Outlined below are two tables taken from countries with proven experience in athletes recovering from COVID.

- **Table 1: Details the pathway depending on the severity of the illness.** It is recommended that athletes who have had moderate to severe reactions should consult their GP before embarking on cardio training. Doctors may advise an ECG, blood test or echo if there have been any heart symptoms such as chest pain, palpitations or fainting. This is because of a small risk the virus has been present in the heart muscle fibres (Myocarditis).
- **Table 2: Recommends how to manage the Graduated Return to Training.** This has been written for Performance Athletes – so will apply to those who fit in this space, but the same principles can be adjusted for other athletes.

Open communication between parents, swimmers and coaches is critical over the return to training programme.

**TABLE 1: PATHWAY BACK TO NORMAL TRAINING – DEPENDING ON SEVERITY OF ILLNESS**



Link to more in-depth information:

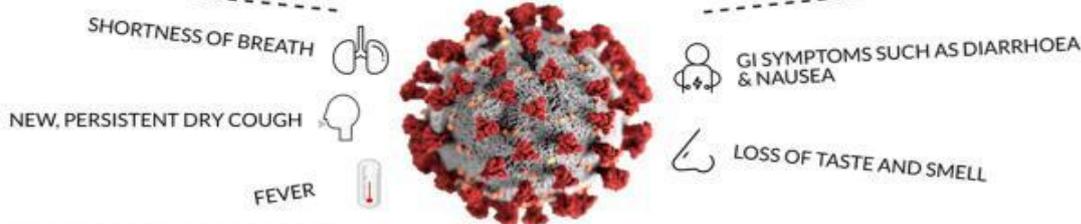
<https://www.uptodate.com/contents/covid-19-return-to-play-or-strenuous-activity-following-infection>

<https://www.healthnavigator.org.nz/health-a-z/c/covid-19-positive-exercise/#:~:text=Returning%20to%20physical%20activity%20and%20exercise%20after%20COVID%2D19&text=Spending%20time%20in%20hospital%20or,your%20other%20COVID%2D19%20symptoms.>

**TABLE 2: GRADUATED RETURN TO PLAY FOR PERFORMANCE ATHLETES**

## COVID-19 GRADUATED RETURN TO PLAY FOR PERFORMANCE ATHLETES: GUIDANCE FOR MEDICAL PROFESSIONALS

### INDICATORS OF COVID-19 INFECTION



THIS GUIDANCE IS AIMED AT ATHLETES WITH MILD TO MODERATE SYMPTOMS OF COVID-19. ATHLETES SHOULD FOLLOW LOCAL GOVERNMENT GUIDELINES OF COUNTRY OF RESIDENCE FOR MANAGEMENT OF SYMPTOMS INCLUDING ISOLATION AND TESTING PROCESSES. ATHLETES WHO HAVE MORE COMPLICATED INFECTIONS, OR REQUIRED HOSPITAL SUPPORT SHOULD HAVE A MEDICAL ASSESSMENT BEFORE COMMENCING GRTP. ASSESSMENT MAY INCLUDE:

BLOOD TESTING FOR MARKERS OF INFLAMMATION (HS-TROP, BNP, CRP). CONSIDER RENAL & HAEMATOLOGY MONITORING

CARDIAC MONITORING (ECG, ECHO, ETT, CARDIAC MRI)

RESPIRATORY FUNCTION ASSESSMENT (SPIROMETRY)



### GRADUATED RETURN TO PLAY PROTOCOL

UNDER MEDICAL SUPERVISION

	STAGE 1 10 DAYS MINIMUM	STAGE 2 2 DAYS MINIMUM	STAGE 3A 1 DAY MINIMUM	STAGE 3B 1 DAY MINIMUM	STAGE 4 2 DAYS MINIMUM	STAGE 5 EARLIEST DAY 17	STAGE 6
ACTIVITY DESCRIPTION	MINIMUM REST PERIOD	LIGHT ACTIVITY	FREQUENCY OF TRAINING INCREASES	DURATION OF TRAINING INCREASES	INTENSITY OF TRAINING INCREASES	RESUME NORMAL TRAINING PROGRESSIONS	RETURN TO COMPETITION IN SPORT SPECIFIC TIMELINES
EXERCISE ALLOWED	WALKING, LIGHT ACTIVITIES OF DAILY LIVING	WALKING, LIGHT JOGGING, STATIONARY CYCLE, NO RESISTANCE TRAINING	SIMPLE MOVEMENT ACTIVITIES E.G. RUNNING DRILLS	PROGRESSION TO MORE COMPLEX TRAINING ACTIVITIES	NORMAL TRAINING ACTIVITIES	RESUME NORMAL TRAINING PROGRESSIONS	
% HEART RATE MAX		<70%	<80%	<80%	<80%	RESUME NORMAL TRAINING PROGRESSIONS	
DURATION	10 DAYS	<15 MINS	<30 MINS	<45 MINS	<60 MINS	RESUME NORMAL TRAINING PROGRESSIONS	
OBJECTIVE	ALLOW RECOVERY TIME. PROTECT CARDIO-RESPIRATORY SYSTEM	INCREASE HEART RATE	INCREASE LOAD GRADUALLY. MANAGE ANY POST VIRAL FATIGUE SYMPTOMS	EXERCISE, COORDINATION AND SKILLS/TACTICS	RESTORE CONFIDENCE AND ASSESS FUNCTIONAL SKILLS	RESUME NORMAL TRAINING PROGRESSIONS	
MONITORING	SUBJECTIVE SYMPTOMS, RESTING HR, I-PRRS	SUBJECTIVE SYMPTOMS, RESTING HR, I-PRRS, RPE	SUBJECTIVE SYMPTOMS, RESTING HR, I-PRRS, RPE	SUBJECTIVE SYMPTOMS, RESTING HR, I-PRRS, RPE	SUBJECTIVE SYMPTOMS, RESTING HR, I-PRRS, RPE	SUBJECTIVE SYMPTOMS, RESTING HR, I-PRRS, RPE	

ACRONYMS: I-PRRS (INJURY - PSYCHOLOGICAL READINESS TO RETURN TO SPORT); RPE (RATED PERCEIVED EXERTION SCALE)  
NOTE: THIS GUIDANCE IS SPECIFIC TO SPORTS WITH AN AEROBIC COMPONENT



INFOGRAPHIC CREATED BY UK HOME COUNTRIES INSTITUTES OF SPORT; ELLIOTT, N. ELLIOTT, J. BISWAS, A. MARTIN, R. HERON, N.

More information on returning to training can be found here: <https://pubmed.ncbi.nlm.nih.gov/32571796/>

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