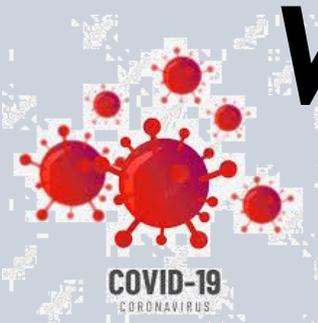


COVID-19 – What you need to know!

Brought to you by
SA Rugby's
Medical Department



What are the possible symptoms of **COVID-19?**



Sore throat, cough, difficulty breathing?

More than 2 days diarrhoea / nausea / vomiting?

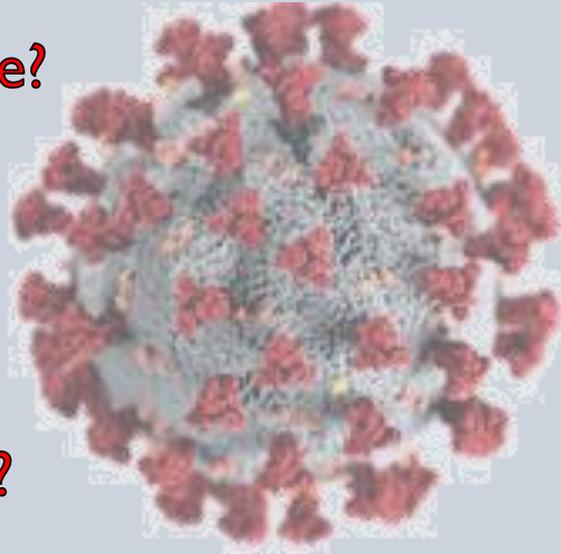


Blocked / runny nose?

Unusual rash?

Fever / shaking chills?

Loss / change of smell or taste?

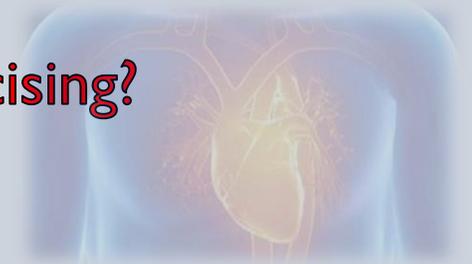


Unusual dizziness?

Body aches / headache?

Difficulty in exercising?

Fatigue?

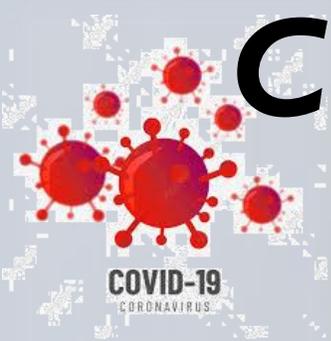


Odd rash on tongue / discoloured fingers / toes? Tightness of chest / chest pain during exercise?



When do I test for **COVID-19**?

- If you develop any of the **SYMPTOMS** of **COVID-19**
- If you have **BEEN EXPOSED** to someone with **COVID-19** and during your 10-day quarantine, you develop symptoms
- Don't test on Day 1 of symptoms – it's too early; wait at least until **DAY 3**



Can I just go for testing, or do I need a medical doctor's request form?

You need a **MEDICAL DOCTOR**'s request form
(best to phone your own doctor to arrange)

This is because a **MEDICAL DOCTOR** must notify the **Department Of Health** for all positive cases (**COVID-19** is a notifiable disease) AND your health and return to exercise / rugby needs to be overseen by a **MEDICAL DOCTOR**



Do I need to RE-TEST after I have had a POSITIVE test?

Swab

Lysis buffer

RT-PCR machine

PCR tests can remain positive for up to 60 days
PCR detects viral genetic material, which could be dead



What are the different sorts of **COVID-19** tests?

RT-PCR is the gold standard

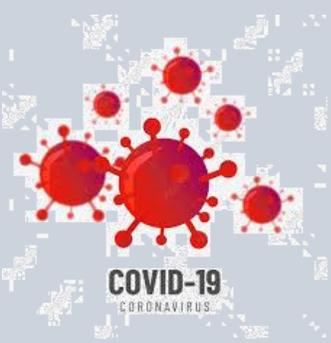
- This stands for *Real-Time Polymerase Chain Reaction*
- This picks up the genetic material of the virus
- **RT-PCR** is done on a nose / throat swab
- Results take 24-48 hours, depending on the turn-around time in the labs
- There is a chance of 'False Negatives'
- 'False Negatives' means you have **COVID-19** but the test does not pick it up
- You can reduce the chance of 'False Negatives' by testing between **Day 3 and Day 5** of symptoms



What are the different sorts of **COVID-19** tests?

COVID Antigen Test

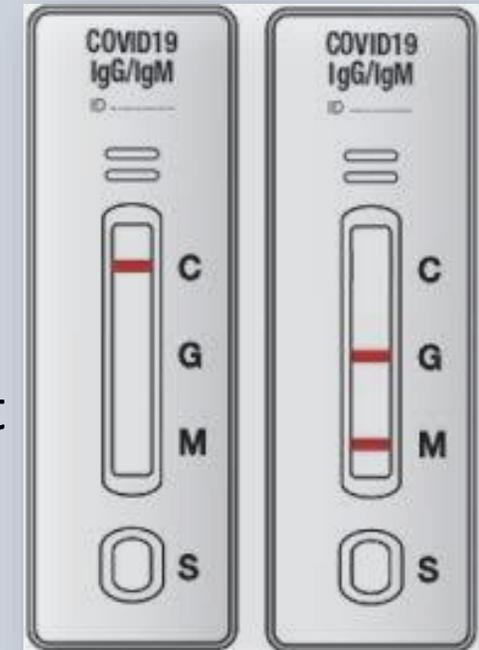
- Rapid tests are **COVID Antigen tests** – they detect the Spike protein
- Also done on a nose / throat swab
- Results take 15-30 minutes
- If *negative* and you have symptoms suggestive of **COVID-19**, the lab will usually do a **PCR** too



What are the different sorts of **COVID-19** tests?

Antibodies test

- Antibodies test for *short-lived antibodies (IgM)* and *longer-term antibodies (IgG)*
- Not everyone develops antibodies
- We're not sure how long antibodies last for and if they protect against different strains of the virus
- Done on a fingerpick blood test (*at pharmacies*) or a blood sample (*in labs*)
- Results take 15 minutes in pharmacies, and 6-24 hours in the lab





I have tested positive...

What now?

EMPLOYER GUIDANCE
FOR **EMPLOYEES** WHO HAVE
TO **SELF-ISOLATE** DUE TO
COVID-19

**WE ALL
MUST DO IT
TO GET
THROUGH IT**

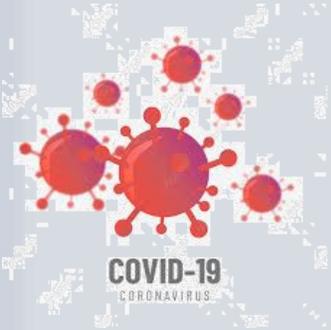


- You need to **self-isolate** at home for **10 days** as per governmental guidelines
- You need to **tell** anyone with whom you were in **close contact*** 48 hours beforehand, that you have tested positive.
- You **were potentially infectious / contagious** for 48 hours before your symptoms started / or before your test, if you have no symptoms (asymptomatic)
- You need to **tell your workplace / school**, and the **COVID-19** manager at your **Rugby Club**

***Close contacts** include household contacts and someone you have been **within 1.5m for more than 15 minutes** (cumulatively over 24 hours)

I have tested positive...

May I exercise?



- You should *not* exercise while you are in self-isolation (for **at least 10 days**)
- For *mild / moderate symptoms*, you should **rest**
- Once your *symptoms have settled*, you should **rest a further 7 days** before starting any cardiovascular exercise
- If you have been *admitted to hospital*, or your symptoms *lasted more than 10 days*: you should **rest for at least 10-14 days before you start** cardiovascular exercise

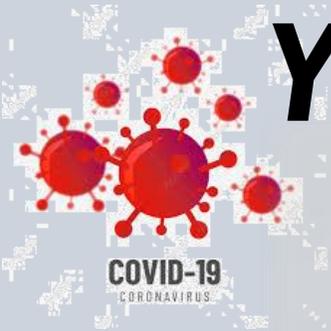
Why the worry about exercising when ill?



There are concerns about developing heart muscle inflammation (myocarditis) with **COVID-19**, and abnormal heart rhythms (arrhythmias) or blood clots to the lungs.

These have the potential to cause **Sudden Cardiac Arrest** (and death), especially when exercising.

COVID-19 can affect the heart and lungs!
Even in people with mild illness / no symptoms at all



YOU MUST see a Medical Doctor BEFORE you start training!

*(if you have had any symptoms of **COVID-19**)*

SARS CoV-2 is the virus responsible for **COVID-19** and it is a novel virus, in other words, **NEW**.

We don't yet know the full extent of its impact on heart and lung health or return to sport.

It is therefore best to adopt a **CAUTIOUS APPROACH**.

What should I do while I am ill?



Support your *immune system* by making sure:

- Are you getting enough sleep?
- Are you eating nutritious foods?
- Top up Vitamins B, C, D and Zinc!
- Rest when your body tells you to!
- If fatigued, pace yourself!



Continue taking any *chronic medication* you are on, especially high blood pressure meds

Take *Panado* and / or *Ibuprofen* for fevers / chills.

Aim for a FOOD FIRST APPROACH to get the nutrients your body needs from food sources rather than supplements to avoid toxic amounts. Consult a health professional before using a supplement

<p>Vitamin D Helps facilitate normal immune system function</p>	<p>Vitamin C Acts as an anti-oxidant. Promotes wound healing & helps resist infections.</p>	<p>Vitamin E Anti-oxidant</p>
<p>Quercetin Stimulates immune system</p>	<p>Probiotics Probiotic bacteria affect the activity of immune cells</p>	<p>Essential fatty acids Enhance immune response</p>

Which nutrients are important for immunity?

R. Moore RD (SA) Z. Simjee RD (SA) National Teams' Dieticians

BokSmart For more information go to: <https://www.springboks.rugby/en/pages/BokSmart-Medical-Protocol-Eating-and-Drinking-Right>

<https://www.springboks.rugby/general/boksmart-medical-protocol-eating-and-drinking-right/>

How do I return to exercise safely?



Once you have:

- Finished your *healing* – **7-14 days** of rest **AFTER** your symptoms have settled **AND** you have been off all medication
- Been *cleared* by a medical doctor – your doctor may want to do an **ECG** and/or **blood tests**

You may then start a ***graded return to exercise!***

When starting your graded return to exercise after **Covid-19**, monitor for any of the following symptoms:

- Chest pain, chest tightness, or difficulty breathing
- Palpitations (racing or irregular heartbeat)
- Dizziness / feeling about to faint / fainting
- A fever or high temperature
- You notice your Heart Rate seems abnormally high for your intensity, or it takes a long time to come down — if you are used to exercising with a Heart Rate monitor!

STOP if you develop any symptoms during your return to exercise and see a **MEDICAL DOCTOR!**

(Your doctor may need to **REFER** you to a lung / heart specialist)

Return to exercise safely – Day 1 & 2

You may do 15 minutes of light **CARDIO exercise!**

Examples could be *light jogging / walk jog or a light cycle on an exercise bike.*

Aim to keep your **Heart Rate** at about **60%** of your expected / known **Maximal Heart Rate (MHR)**, but not more than **70%**

To estimate your expected **Maximal Heart Rate**:
MHR = 220 minus your age (in years)

EXAMPLE

If you are 20 years old: expected **MHR** is $220 - 20 = 200$

60% of 200 = 120 beats per minute (bpm)

70% of 200 = 140 beats per minute (bpm)

To measure your **Heart Rate**: feel your pulse at your wrist, count the number of beats in 15 seconds and multiply by 4

If you have a **Heart Rate** monitor on your watch, use that!

Also take note of your **RPE** – **Rating of Perceived Exertion**.
How hard does the exercise feel on a scale of 1-10?

Return to exercise safely – Day 3

You may do 30 minutes of **CARDIO** exercise!

Examples include *running drills*

Aim to keep your **Heart Rate** at about **70%** of your expected / known **Maximal Heart Rate (MHR)**, but not more than **80%**

To estimate your expected **Maximal Heart Rate**:

MHR = 220 minus your age (in years)

EXAMPLE

If you are 20 years old: expected **MHR** is $220 - 20 = 200$

70% of 200 = 140 beats per minute (bpm)

80% of 200 = 160 beats per minute (bpm)

Measure your **Heart Rate**

- **BEFORE** you start
- Every 5 minutes **DURING** exercise
- 5 minutes **AFTER** you have finished exercising

Monitor your **RPE** – **R**ating of **P**erceived **E**xertion.

How hard does the exercise feel on a scale of 1-10?

Return to exercise safely – Day 4

You may do 45 minutes of **EXERCISE!**

You may start to incorporate *passing drills* and more complex training activities

Aim to keep your **Heart Rate** at about **70%** of your expected / known **Maximal Heart Rate (MHR)**, but not more than **80%**

To estimate your expected **Maximal Heart Rate**:

MHR = 220 minus your age (in years)

EXAMPLE

If you are 20 years old: expected **MHR** is $220 - 20 = 200$

70% of 200 = 140 beats per minute (bpm)

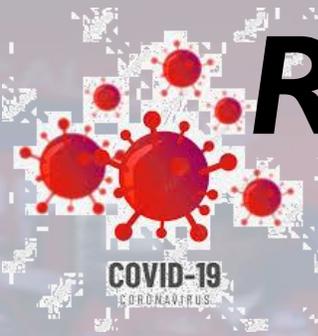
80% of 200 = 160 beats per minute (bpm)

Measure your **Heart Rate**

- **BEFORE** you start
- Every 5 minutes **DURING** exercise
- 5 minutes **AFTER** you have finished exercising

Monitor your **RPE** – **R**ating of **P**erceived **E**xertion.

How hard does the exercise feel on a scale of 1-10?



Return to exercise safely – Day 5&6

You may do 60 minutes of EXERCISE!

You may do normal training drills (see additional advice on CONTACT training)

Aim to keep your **Heart Rate** below **80%** of your expected / known **Maximal Heart Rate (MHR)**

Measure your **Heart Rate**

- **BEFORE** you start
- Every 5 minutes **DURING** exercise
- 5 minutes **AFTER** you have finished exercising

Monitor your **RPE** – **R**ating of **P**erceived **E**xertion.

How hard does the exercise feel on a scale of 1-10?

It takes **at least 7 days** from starting the graded return to exercise, to get back to normal training, **after having recovered** from **Covid-19!**

Return to exercise safely – Day 7

Normal training!

Unrestricted **Heart Rate** but continue monitoring for any symptoms

Measure your **Heart Rate**

- **BEFORE** you start
- Every 5 minutes **DURING** exercise
- 5 minutes **AFTER** you have finished exercising

Monitor your **RPE** – **R**ating of **P**erceived **E**xertion.

How hard does the exercise feel on a scale of 1-10?



General tips for RUGBY training!

(when Government Regulations allow for RUGBY training)



- Continue **Social distancing**
- Access to **Hand sanitisers** at entry to gym / field
- **COVID-19** Manager responsible for **Screening** on entry to club
- **Avoid HIGH 5's**
- **Wear masks** when not training e.g., in the clubhouse / changing rooms
- **No shared** water bottles
- **No spitting / 'snotting'** (clearing of the nose) onto the field
- **Clean equipment** after using it (field / gym) with bleach-based solutions
- **Respiratory 'etiquette'**: cough / sneeze into elbow, or if into a tissue, discard immediately
- **Don't go** to training if you feel unwell

Alert your COVID manager if you test positive for **COVID-19**
or must quarantine as a '**Close Contact**'



When can we start playing matches?

Minimum of **4 weeks** of
STRENGTH & CONDITIONING training



Minimum of **4 weeks** of
CONTACT training & match play preparation



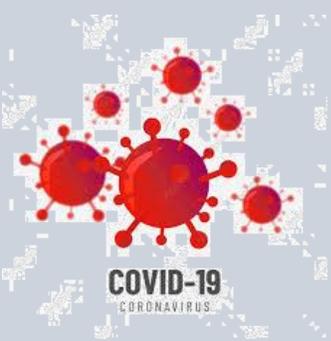
MATCH ready!

WHY?

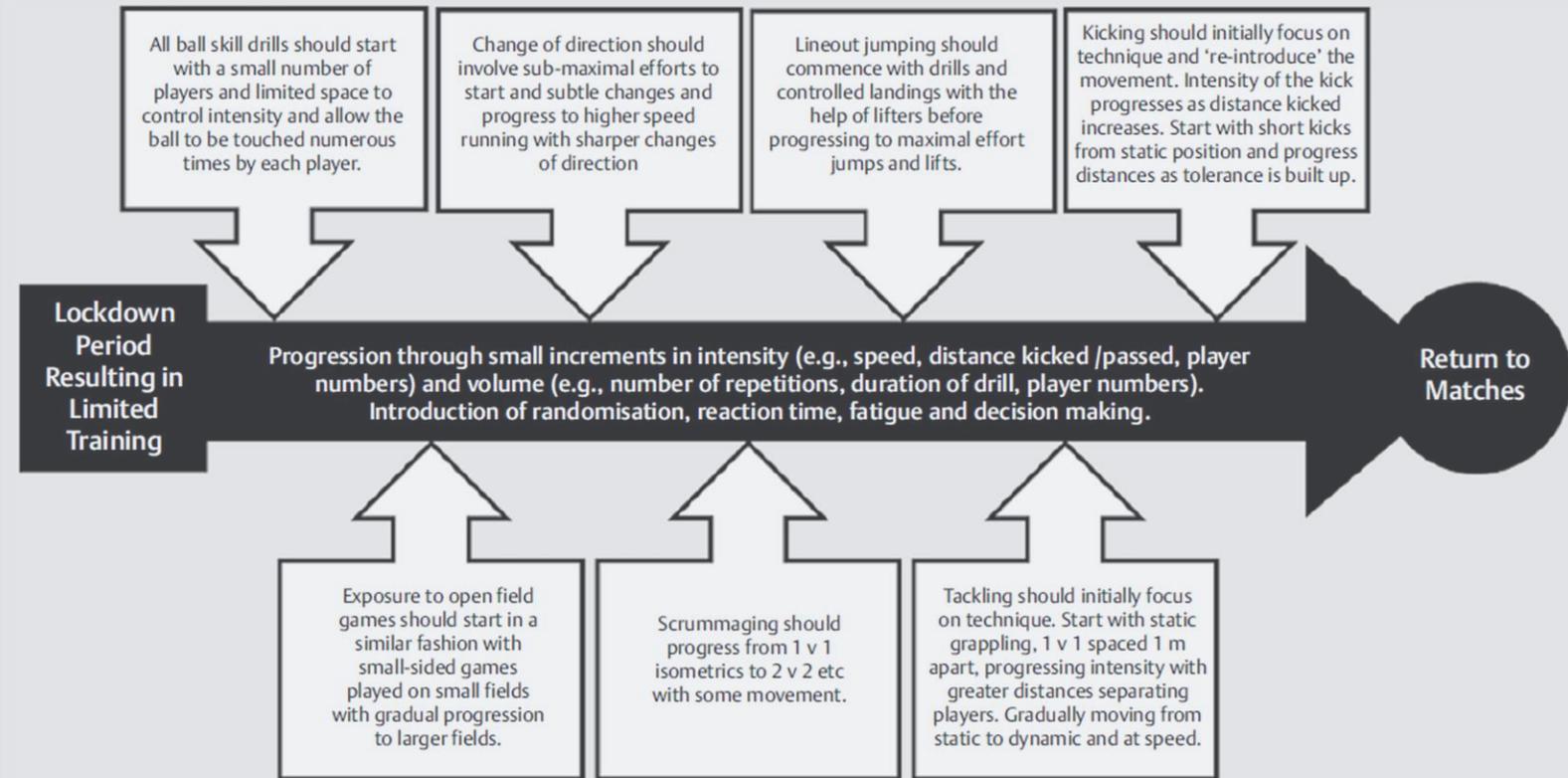
- The risk of injury associated with being unfit *and* less than optimal strength
- Allows time for development of adequate physical strength and fitness
- After a lengthy period away from RUGBY, allows for :
 - *Sufficient technical skill (re)-acquisition (for e.g., tackle technique)*
 - *Better physical adaptation*
 - *Improved Contact preparation and tolerance*

Ensure your Rugby Club has an up-to-date **Emergency Action Plan**, in the event of a collapse!

Contact training progressions?



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► **Fig. 2** Training considerations following return to play after the period of restricted training due to COVID-19. Reintroduction of group training will require progressions and structure of training to be developed with reference to risk of COVID-19 transmission.

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