



health

Department:
Health
REPUBLIC OF SOUTH AFRICA



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**INTERNAL MEMO:
ADVISORY ON THE URGENT NEED TO ADDRESS THE CURRENT CHALLENGES IN TESTING
THROUGH PRIORITISATION FOR THE SARS-COV-2 DAILY TEST TARGETS**

Date:	04 June 2020		
To:	Minister ZL Mkhize, Honorable Minister of Health	From:	Ministerial Advisory Committee (MAC) on COVID-19

**ADDRESSING THE CURRENT CHALLENGES IN TESTING THROUGH PRIORITISATION
FOR THE SARS-COV-2 DAILY TEST TARGETS**

Background to request for Advisory sent to MAC/Problem/Concern

In mid-May 2020, Dr Y Pillay (the former Deputy Director-General: Communicable Diseases; Non-communicable Diseases; Treatment, Prevention and Rehabilitation) had requested guidance regarding the optimal daily target of SARS-CoV-2 polymerase chain reaction (PCR) tests to be conducted by the country’s labs in the coming months. This was based on a situation where current demand for SARS-CoV-2 PCR tests had outstripped the combined testing capacity of the National Health Laboratory Service (NHLS) and private laboratories. The massive increase in testing demand without concomitant availability of test kits to keep up with demand has caused a substantial testing backlog, resulting in an increase in turn-around times (TATs) of several days. Long TATs make clinical decision-making and decisions regarding isolation and quarantine difficult. A working group of the MAC on COVID-19 was convened to provide recommendations on this matter. These recommendations were then discussed with the MAC on COVID-19 for further input and the recommendations in this advisory were agreed.

MAC review

Refer to final report of the Daily testing targets sub-group of the MAC on COVID-19

The working group reviewed the current testing guidance with the aim of re-prioritising target populations for SARS-CoV-2 testing. Priority testing populations were identified - samples from these prioritized populations could be allowed to “skip” the current queue of tests that is traditionally ordered by date of intake, and reduce TAT for these groups to ensure tests remain clinically relevant. Based on the new list of priority testing populations, the daily testing targets were calculated with and without taking current laboratory capacity into account. Three priority levels, high, medium and low were identified. The resulting priority list serves as a guidance to clinicians considering laboratory tests and to allow the NHLS to prioritise tests at sample intake.

There are a number of areas for further work that were not fully considered by the working group but that might be included in future work if additional evidence becomes available.

MAC recommendations for urgent consideration

1. The **current testing challenges need to be addressed urgently**.
 - a. Several of the NHLS laboratories are caught in a spiral, where their efforts to deal with the current backlog are thwarted by ever-increasing numbers of samples being received thereby worsening the backlog
 - b. Clinicians are frustrated by the delays in obtaining results for patients, in particular in the hospital setting where housing patients in different wards according to Covid-19 status is vital for infection control and prevention
 - c. Efforts to identify hotspots are being compromised and outbreaks cannot be properly investigated
 - d. Case numbers being reported each day are impacted by the delays in testing
 - e. The overall strategy to deal with the current testing challenges as well as the approach to the backlog need to be publicly communicated
2. The **current backlog needs to be quickly resolved** in a rational manner that does not use available scarce tests with open communication with the public on the steps taken to deal decisively with specimens that are considered too delayed (for example, 2-4 days after collection) for testing
 - a. The quality of specimens deteriorates over time and results may become unreliable if testing is delayed. Decisions regarding the testing of these samples will be made by experienced laboratory staff in consultation with clinical staff, when necessary
 - b. Pilot pooling programmes could assist in catching up, where positive test proportions are low
 - c. Backlogs should be prevented from accumulating in the future by taking steps to ratchet down the demand for testing and continuing efforts to increase the supply of test kits.
3. All **samples arriving at the NHLS laboratories be prioritised** and available test kits be utilized in the sequence of priority according to the list and colour code below:
 - a. This priority list be communicated to staff at all COVID-19 testing centres, public and private hospitals, general practitioners, primary and community healthcare clinics as well as the NHLS and private laboratories
 - b. The NHLS implement a triage system using coloured stickers or similar mechanism that, when used by the ordering healthcare worker, communicates the order of priority and type of testing population for every sample sent for a SARS-CoV-2 PCR test.
 - c. This prioritisation approach be shared with the private laboratories so that they can align their testing with the national priorities
4. Take **steps to reduce the demand and requests for testing**:
 - a. Under the current testing constraints, the daily testing target should be at least 20,000 PCR tests for June 2020 and from September 2020 onwards. The daily testing target should be at least 30,000 PCR tests per day in July and August 2020. These targets may need to be updated as new epidemiological projections become available.

- b. Random screening and testing strategies involving largely healthy people attending, amongst others, shopping malls and/or community venues be adjusted to exclude Covid-19 testing
- c. Implementation of the MAC on Covid-19 Advisory of 8 May entitled “Switching from Community Screening and Testing to Hotspots” be fast-tracked. Where community-based screening is still ongoing and is not able to stop rapidly, screened individuals who trigger the symptom checklist should not be referred for testing but be requested to quarantine for 14 days on a presumptive diagnosis
- d. Routine asymptomatic employee testing for the purposes of returning to work has no value other than creating a false sense of security and should not be undertaken. Similarly, routine testing of groups (such as sportspeople) who are asymptomatic contributes little to the control of Covid-19 and should not be undertaken
- e. Clinically-well individuals traced in the community as contacts of known Covid-19 positive people be placed in 14-day quarantine on a presumptive diagnosis with no testing

5. Take **steps to increase the availability of PCR tests:**

- a. The NHLS should engage with manufacturers and suppliers globally and regionally to increase the testing capacity to at least 50,000 SARS-CoV-2 PCR tests per day in anticipation of the surge of cases in the next few months
- b. Alternatives to the extraction kits be explored in order to utilize the currently available non-automated (e.g. ThermoFisher) test kits

The above recommendations need to be urgently implemented given the implications of the current testing backlog.

Thank you for your urgent consideration of this request.

Kind regards,



PROFESSOR SALIM S. ABDOOL KARIM

OVERARCHING CHAIRPERSON: MINISTERIAL ADVISORY COMMITTEE ON COVID-19

DATE: 04 June 2020

CC:

- » **Dr S Buthelezi (Director-General)**
- » **Dr T Pillay (Deputy Director-General: National Health Insurance)**
- » **Dr S Zungu (Project Lead: Sectoral Response to Covid-19)**
- » **Ms R Pretorius-Ngobeni (Secretariat: Implementation Management Team)**