



health

Department:
Health
REPUBLIC OF SOUTH AFRICA



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INTERNAL MEMO

Date:	30 October 2020		
To:	Minister ZL Mkhize, Honorable Minister of Health	From:	Ministerial Advisory Committee (MAC) on COVID-19

USE OF ANTIGEN TESTS AT PORTS OF ENTRY

Problem Statement

Travelers entering South Africa are required to provide the negative results of a polymerase chain reaction (PCR) test done within 72 hours of departure prior to entry. However, if travelers enter the country without this, can the use of an antigen rapid test at the entry port be considered?

Evidence review

- The World Health Organization interim guidance on antigen-detection in diagnosis of SARS-CoV-2 infection using rapid immunoassays recommends that antigen rapid diagnostic tests (RDTs) should not be used for airport or border screening. This is due to Covid-19 prevalence being highly variable amongst travelers and therefore not possible to determine positive and negative predictive values of test results. It advises additional testing would be needed in decision making.¹
- Sensitivity and specificity, as well as the potential to miss detection of infected patients in the incubation period, are current concerns with the use of antigen RDTs for screening at ports of entry.
- Antigen RDTs, however, may provide a potential triaging for travelers, and prevent the unnecessary quarantine of all travelers who do not provide the required negative PCR test results prior to entry.

Recommendations

- For airports and sea port entry, it is strongly recommended that airlines/ shipping companies enforce that negative results of a PCR test conducted within 72 hours of departure be produced, with departure prevented where a negative PCR test is not shown.

¹ The World Health Organisation. Antigen-detection in the diagnosis of SARS-CoV-2 infection using rapid immunoassays – Interim guidance. 11 September 2020. <https://www.who.int/publications/item/antigen-detection-in-the-diagnosis-of-sars-cov-2infection-using-rapid-immunoassays>

- If travellers present without a PCR test result on arrival at a South African airport or sea port, an antigen RDT should be taken at the point of entry. If the antigen test result is negative, the traveller can be allowed into the country. However, if the antigen test result is positive, a confirmatory PCR test will need to be taken and the traveller will need to quarantine in a hotel until PCR results are available. If the PCR test result is negative, the traveller will be released from quarantine. However, if the PCR test result is positive, the traveller will need to continue quarantine at a hotel or designated facility.
- All costs for tests and quarantine are incurred by the traveller.
- A designated area will need to be available for both air and sea ports where antigen/PCR test samples can be taken. Infection prevention control will need to be observed in line with Covid-19 recommendations. Samples for testing must to be taken by a trained individual.

Rationale for recommendations

- Antigen RDT screening at ports of entry for those travelers without a negative PCR test result within 72 hours from departure will allow for more efficient screening of travelers that may be infected with Covid-19, rather than all travelers without a PCR result being forced to quarantine unnecessarily while awaiting results.
- This approach will enable the borders to be open to many more countries, including those where PCR testing is not readily available or a PCR test result is not available within 72 hours.
- By placing the financial burden of the rapid Ag test, and if required - a confirmatory PCR & quarantine at a designated facility – travelers to South Africa are being incentivized to have a PCR test within 72 hours from the country of departure.
- Note that entry into South Africa by road will likely require a more complex set of procedures due to multiple entries and exits over short periods, for example, by truck drivers. The 5 neighbouring countries with road entry into South Africa have epidemics that are less severe than South Africa and the movement patterns are complex, requiring a more pragmatic approach while risk of importation of the virus is low.

Thank you for consideration of this request.

Kind regards,



PROFESSOR SALIM S. ABDOOL KARIM

CO-CHAIR CHAIRPERSON: MINISTERIAL ADVISORY COMMITTEE ON COVID-19 DATE:

CC:

- » **Dr J Phaahla (Deputy Minister)**
- » **Dr S Buthelezi (Director-General)**
- » **Dr T Pillay (Deputy Director-General)**
- » **Incident Management Team**