



## Review Article

JMR 2020; 6(6): 311-312

November- December

ISSN: 2395-7565

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www.medicinarticle.com

Received: 25-11-2020

Accepted: 31-12-2020

# Covid-19: "Drive thru swabbing hubs" – safe and effective testing for travellers

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## Abstract

**Background:** With increasing number of international travellers taking flights and the need of stringent quarantine regulations across the globe in view of the COVID-19 pandemic, it has become a mandatory requirement for many airlines and countries to have a COVID-19 RT-PCR Negative certificate for travellers within a time-specific period prior to boarding flights. **Method:** As the demand for RT-PCR testing in this group of asymptomatic well individuals who are planning to travel is increasing, they present to COVID testing centres for their swab tests, where suspected COVID patients also attend, thereby increasing the risk of exposure of these healthy people to possibly infected individuals. Hence, the Ministry of Public Health (MOPH) in Qatar implemented "Drive-Thru" swabbing hubs to address this potential issue. We analysed the usefulness of this MOPH initiative and how it has helped tackle the challenge. **Results and Conclusion:** With a reduced risk of exposure for travellers to potentially suspected COVID-19 patients in COVID centres, the "Drive-Thru" swabbing hubs have been a pragmatic, welcome and wonderful initiative. This has contributed to curb the spread of COVID-19 by facilitating easy testing thereby alleviating anxiety in travellers as well as reducing the burden of an exponentially increasing number of travellers presenting to COVID centres.

**Keywords:** Pandemic, Primary Care, Public health, RT-PCR, Screening.

## INTRODUCTION

An outbreak of a novel coronavirus disease (COVID-19) occurred in Wuhan, China in the beginning of late December 2019 [1]. Subsequently, several clusters of COVID-19 outbreaks have been reported in over 110 countries around the world within 2 months of the first reported case, leading the World Health Organization to declare the escalating situation as a global pandemic on the 11<sup>th</sup> March 2020 [2].

The first case of COVID-19 in Qatar was confirmed on the 27<sup>th</sup> February'20 when a Qatari national was evacuated from Iran on a governmental chartered repatriation flight. It was noted that nearly 45% of people infected by SARS-CoV-2 were likely to be asymptomatic but still infective [3]. With the increasing number of suspected and symptomatic individuals needing to be tested for COVID-19, there has been a need for a safe and efficient screening system across the world.

Passing through the stages of the pandemic in the last few months, countries have been working hard to overcome the peak wave of COVID-19 and ease lockdown across different states to facilitate economic recovery, resuming flights to various destinations ever since. Simultaneously, pharmaceutical industries have been working round the clock to facilitate a fast-track vaccine approval as governments across the world aim to reinstate normalcy as soon as possible.

Although imposing travel restrictions with traveller screening at airports is now the norm, nearly all countries have places stringent regulations for traveller to have a reverse-transcriptase polymerase chain reaction (RT-PCR) test of oropharyngeal/nasopharyngeal samples as the preferential screening tool as a mandatory requirement, prior to travel.

The MOPH have hence directed for all travellers to have a "Fit to Travel Certificate" with a RT-PCR COVID-19-Negative result, at least 72 hours prior to the departure date, as a compulsory document needed for boarding any outbound flight from Qatar.

As a result of this requirement, the number of travellers presenting to Covid-Centres has been increasing exponentially ever since. With limited testing capacities of health-centres, where suspected COVID-positive patients also attend for RT-PCR-swab tests, this has augmented the risk of infection to travellers causing a lot of stress and anxiety among them with prolonged waiting times too.

Consequently, the MOPH considered the option of implementing drive-through screening centres which have been designed and executed for testing patients in different countries around the world [4]. These centres have gained popularity and have been considered as a unique and effective method to ensure

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testing of a large volume of patients with minimum exposure for both health care professionals as well as patients undergoing tests <sup>[4]</sup>.

## METHODS

We analysed the initiatives made by the MOPH of Qatar to limit the exposure of travellers to potentially positive patients in the health centres' by implementing "Drive-thru" swabbing hubs for those needing a "Fit-to-travel Covid-19 Negative" certificate, which is a mandatory requirement by all airlines.

Adopting a safe and efficient method to test a large population of well people was the major logistical challenge faced by countries worldwide and this was previously successfully accomplished in Singapore and South Korea too, as they managed to flatten the curve of the pandemic by means of aggressive testing and isolation of cases <sup>[5]</sup>.

MOPH hence adopted a similar strategy, working with a multi-disciplinary team, responding to the evolving dynamic challenges for testing of travellers. They implemented "drive-thru swabbing hubs" in the car-park areas of four health centres in Qatar to help to manage the increasing numbers of travellers and mitigate the risk of infection to these travellers.

Any traveller needing a fit-to-travel certificate, was advised to present at the designated hub, where they registered in the drive-thru greeting area, showing a valid passport and a flight ticket without the need of getting out of the car, after which naso/oropharyngeal swab specimens were taken from the traveller by the healthcare professionals. Travellers also had the options of booking an appointment and receiving an SMS confirmation of the same with a date-time slot, having to show a valid ID to verify their invitation on arrival. Travellers then received their results by a text message within 24 hours of having the test done, with instructions as to how to collect their fit to travel certificate from the nearest hub.

## RESULTS

This was a wonderful clinical initiative and solution by the MoPH to the challenge presented with various advantages. Most importantly, this reduced the risk of cross-infection to potential travellers as they were completely separate from potential patients who present to Covid health centres for a RT-PCR swab test, as a result of which the parallel pathway was a very welcome initiative for asymptomatic well travellers who needed to fly. Secondly, with the implementation of the Drive-Thru hubs, travellers were very much satisfied with the convenience of getting the test done whilst in their own cars, thereby minimising their stress and anxiety. Thirdly, it helped increase testing capacity of the public health team in an efficient manner with excellent staff and traveller satisfaction.

It has been previously shown that drive-thru testing hubs was also a very effective strategy to reduce the number of PPE equipment such as masks, gowns and gloves required by health care professional teams and hence a preferred mode of mass testing especially in an epidemic or a pandemic situation <sup>[6]</sup>.

The whole process could potentially take about 10 minutes as shown by Eastin et al when this service was implemented in Korea with much reduced waiting times in addition to minimising exposure, thereby preventing cross-infection between testees as well as being a convenient option for pregnant women, children and people with special needs, this certainly looks like the ideal way ahead to tackle this challenge <sup>[7]</sup>.

## CONCLUSION

We recommend public health departments across various countries to perhaps consider implementing similar Drive-Thru hubs to facilitate easy testing for travellers, as lockdown ease and flight resume globally,

thereby minimising risk and helping transition towards normalcy in the global fight against COVID-19.

## Conflict of Interest

None declared.

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