

Abstract

Strengthened COVID-19 Medical Triage Response to the Influx of Variants at the Incheon Airport National Quarantine Station, 2021

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SARS-CoV-2 (COVID-19) has undergone many changes and variants have been reported worldwide. Three variants that share the N501Y mutation were identified: one in the United Kingdom (UK) identified as B.1.1.7, one in Republic of South Africa identified as B.1.351, and one in Brazil identified as P.1. Although mutations are an expected part of the spread of any virus, continued monitoring, prevention and surveillance are essential. The aim of this report was to share the results of the medical triage response to the influx of COVID-19 variants at the Incheon Airport National Quarantine Station (IANQS).

Findings indicated that the IANQS adapted the COVID-19 medical triage for variant countries through the adjustment of body temperature, epidemiological investigations of inbound arrivals, and COVID-19 polymerase chain reaction (PCR) testing of all inbound arrivals from variant countries.

As a result of strengthened COVID-19 medical triage and reinforced quarantine for arrivals from variant countries, and by responding quickly to national policy according to the influx of variants, the first case from three variant countries was confirmed at the IANQS in December 2020(B.1.1.7), and two other variants were confirmed at the IANQS in January 2021(B.1.351, P.1). Although variant cases are expected to continue, community transmission was blocked in advance due to the medical triage response at the IANQS. This report recommended that the IANQS continue to block the spread of identified variants and be prepared to respond to emerging variants

Keywords: COVID-19, Variant, B.1.1.7, B.1.351, P.1, Incheon Airport National Quarantine Station (IANQS)

Table 1. Changes in the standards of evaluating and testing COVID-19 PUI and strengthened COVID-19 Medical triage at the Incheon Airport National Quarantine Station (IANQS)

	Standards of COVID19 PUI	COVID-19 medical triage for arrivals from variant countries	COVID-19 PCR Test of all inbound arrivals from variant countries
	Non-contact thermometer measurement	Eardrum thermometer measurement	Eardrum thermometer measurement
Inbound Travelers	1. Fever (Over 37.3℃) 2. Symptom (Respiratory, Non-respiratory)	1. Fever (Over 37.3℃) 2. Symptom (Respiratory, Non-respiratory) 3. Co-Inbound travelers of the fever patient. 4. Co-Inbound travelers of the Respiratory /Non-respiratory symptomatic patient.	COVID-19 PCR Test of all inbound arrivals according to their stay in the variant countries.
In-flight staff	- (Symptomatic) PCR test at IANQS - (Asymptomatic) Active monitoring	- (Symptomatic) PCR test at IANQS - (Asymptomatic) PCR test at facility designated by the Korean Government	

Arrival Date	2021-01-26	0000	2021-01-26	2359	Flights		Passenger / Rights attendants		National	
Departure			Transit		Departure or Transit Resident Registration Number		National or Departure or Transit		Arrivals	
Name		Date of birth			Age range		Passport Number		T1/T2	
Phone Number		Sex					Test Result		Continent	
Airport		Airport			Airport					

Figure 1. Classification of the country of residence through the disease and health system

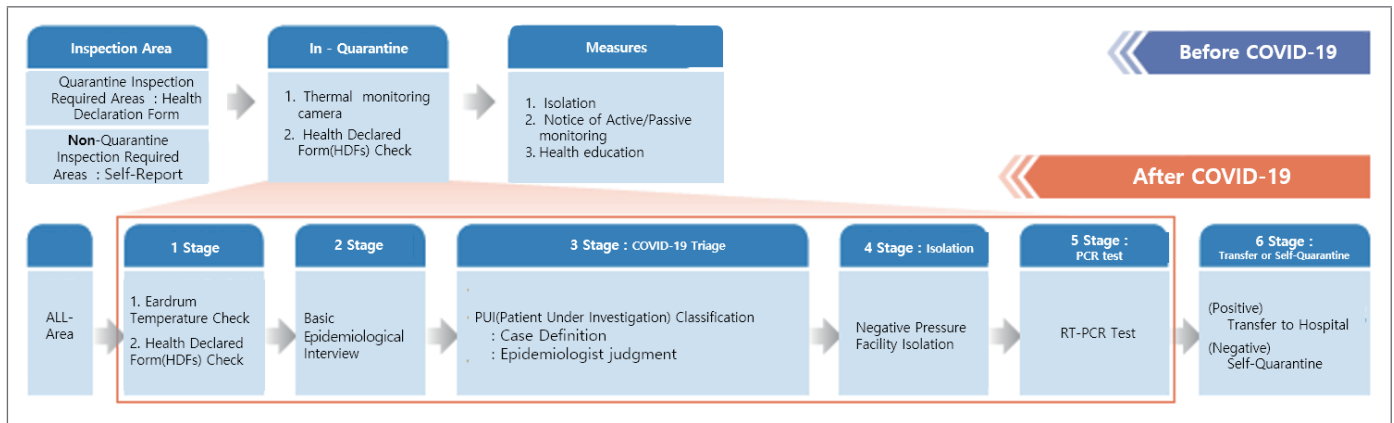


Figure 2. Before COVID-19 Quarantine procedures and ALL-ROUND Quarantine system procedures

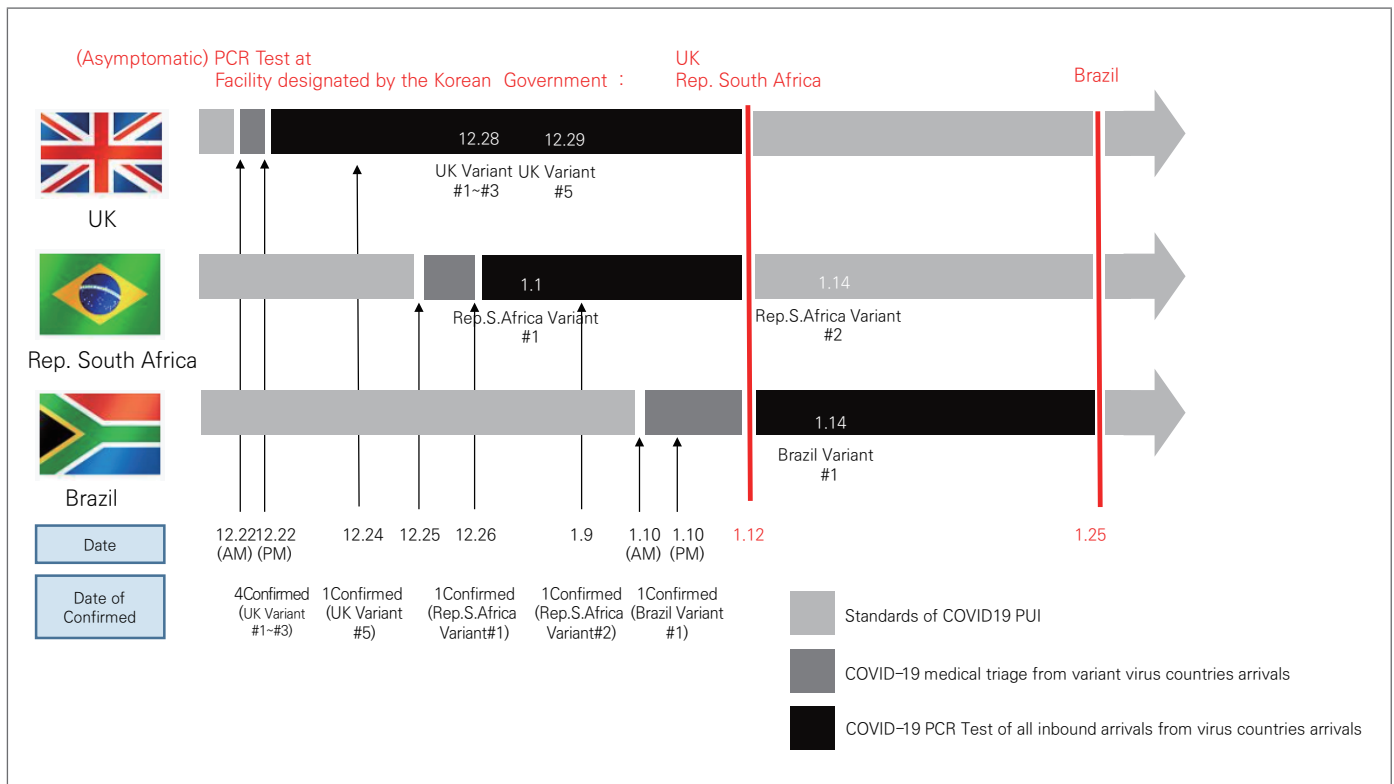


Figure 3. A timeline of the occurrence of variants and changes in the COVID-19 medical triage at the Incheon Airport National Quarantine Station (IANQS)