

Abstract

Cases of outbreaks caused by COVID-19 variant in the Republic of Korea

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In December 2020, a mutant virus originating from the UK was first identified in overseas travelers who entered Korea. Thereafter, until March 1, a total of 162 cases of Variants of Concern(VOCs) have been confirmed. There were 5 cases of VOCs in the cluster outbreaks confirmed by March 1st. Of these, three cases were conducted in detailed epidemiological investigations.

The purpose of this report was to describe the propagation pathways and epidemiological relationships between groups, and to report on the results of contact follow-up management.

This report recommended responding to the occurrence of confirmed patients in groups with high possibilities of carrying a variant and establishing measures to prevent the spread of the local community.

Keyword: COVID19, Variant, inflow from abroad

Table 1. Status of variants identification among clusters (as of March 21, 2021)

Case name	Outbreak period (confirmed date)	Status			Putative infection Route
		Total (foreigner)	Confirmed cases ¹⁾	Epidemiological related cases ²⁾	
Cluster1 Gyeongnam/Jeonnam Foreign Relatives gathering	1.7–1.29.	38 (38)	13 (UK Variant (501Y.V1))	25	Overseas inflow
Cluster2 Family related to Siheung-si, Gyeonggi-do	1.29–1.30.	8 (8)	7 (UK Variant (501Y.V1))	1	Foreign community related
Cluster3 Related to Relatives gathering 2 in Yeoju, Gyeonggi-do	2.10–2.23.	31 (31)	7 (UK Variant (501Y.V1))	24	Foreign community related

1) Variant confirmed cases: A case of confirmed mutant strains (UK, South Africa, Brazil) as a result of the virus analysis

2) Epidemiological related cases: The mutant virus analysis was not performed, but the contact history with the mutant virus infected person was confirmed in a situation where no other infectious source was identified epidemiologically.

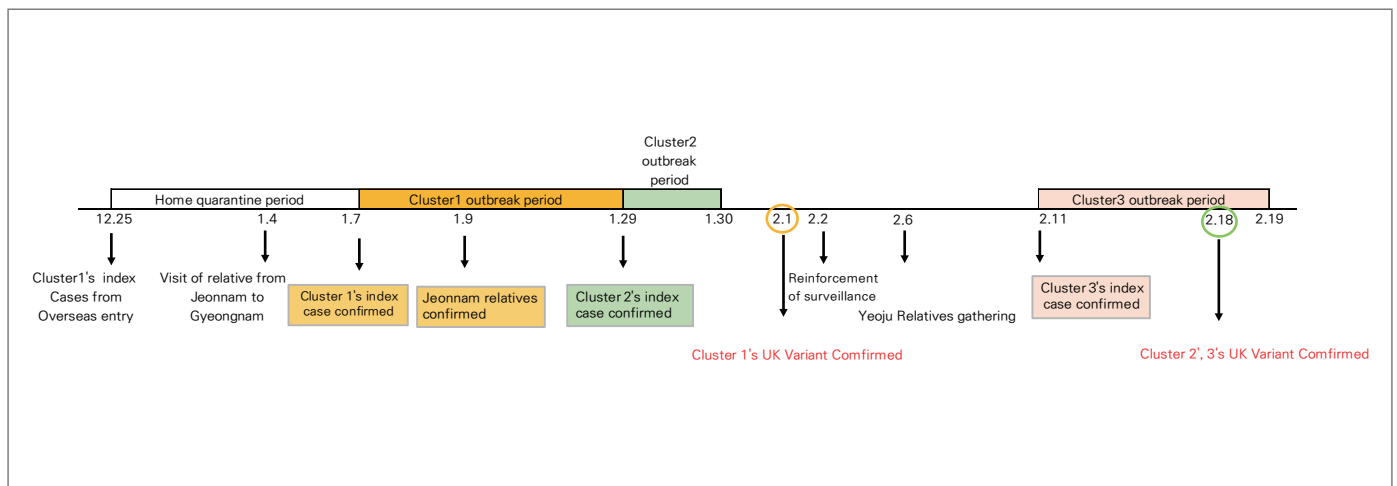


Figure 1. A timeline of the COVID-19 variants group

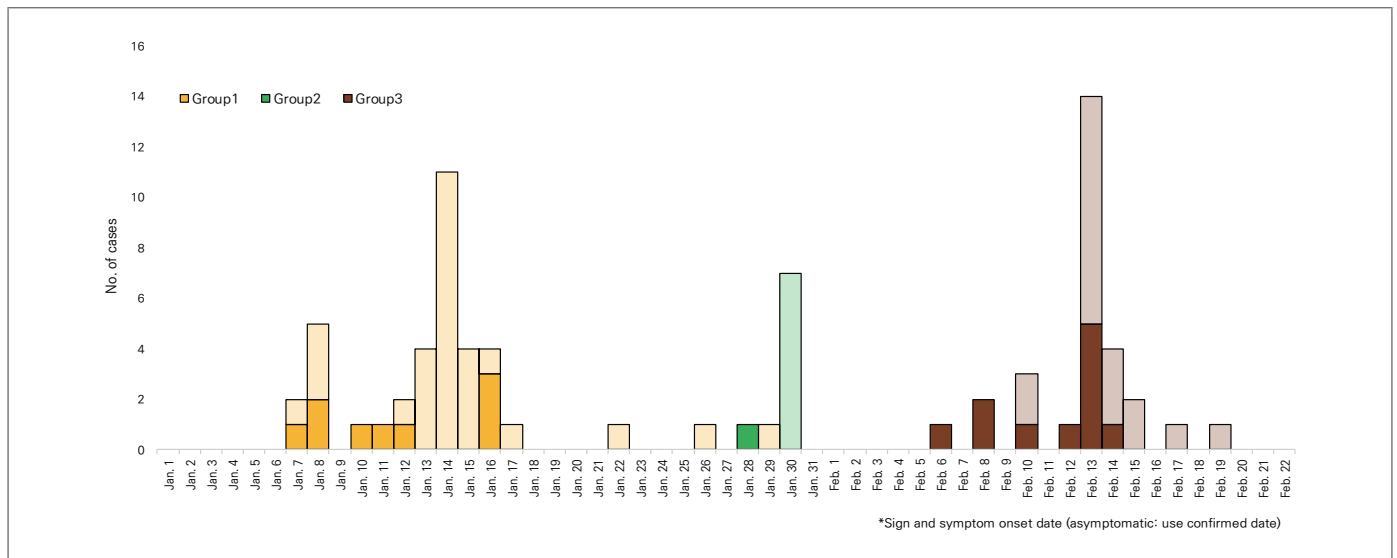


Figure 2. Epidemic curve of the outbreak

Table 2. Results of strengthening community monitoring

Target group		Test (RT-PCR)	Negative	Positive
management group	quarantine	52	52	0
	Active monitoring	53	53	0
	Passive monitoring	14	14	0
preemptive test group	Workplace	383	383	0
	Others (foreigner preemptive test)	128	127	1
Total		630	629	1