

(as of March 23, 2020)

Tackling COVID-19:

Health, Quarantine and Economic Measures of South Korea

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¹ This Paper on "Tackling COVID-19: Health, Quarantine and Economic Measures of South Korea" is prepared by the Development Finance Bureau at Ministry of Economy and Finance (MOEF) in collaboration with Korea Centers for Disease Control & Prevention(KCDC) and Ministry of Health and Welfare (MOHW). Please contact djlee2@korea.kr (Director Daejoong LEE), junseokpark@korea.kr (Deputy Director Junsuk PARK) or hjilee830@korea.kr (Deputy Director Hyunji LEE) for further information.

Tackling COVID-19



President Moon Jae-in is holding a Special Meeting in Daegu City for COVID-19 Measures
(February 25, 2020)

“We are fully able to **overcome the COVID-19 outbreak** and will **by all means** prevail. The central and local governments as well as the private and public sectors are all pooling their strengths. Local residents and all of the people are adding to those strengths by taking on **leading roles regarding quarantine measures.**”

President Moon Jae-in
Republic of Korea

As mentioned by President Moon Jae-in of the Republic of Korea, the impact and wave of health and economic crisis caused by COVID-19 is the first of its kind. In order to overcome this crisis, it is very important to make joint efforts at the regional and national levels, as well as globally. This paper is a summary of Korea’s health and economic response against COVID-19 over the past two months from January to March 23, 2020.

(To be updated)

Table of Contents

1. Introduction.....	3
2. COVID-19 Situation in Korea.....	5
3. Health and Quarantine Measures.....	9
4. Economic and Financial Measures.....	16
5. Conclusion.....	22
Reference	23
Annex	24
1. EVOLUTION OF COVID-19 IN KOREA.....	24
2. LIST OF PUBLIC HEALTH MEASURES.....	25
3. SUMMARY OF ECONOMIC MEASURES AGAINST COVID-19	26
4. PUBLIC ANNOUNCEMENT POSTERS ON COVID-19	29

1. Introduction

With the spread of COVID-19, the world is facing an unprecedented economic and health crisis. Many global leaders and economists view COVID-19 as “the gravest challenge since World War II.” On March 16, the G7 leaders issued a joint statement “acknowledging that the COVID-19 pandemic is a human tragedy and a global health crisis, which also poses major risks for the world economy.”

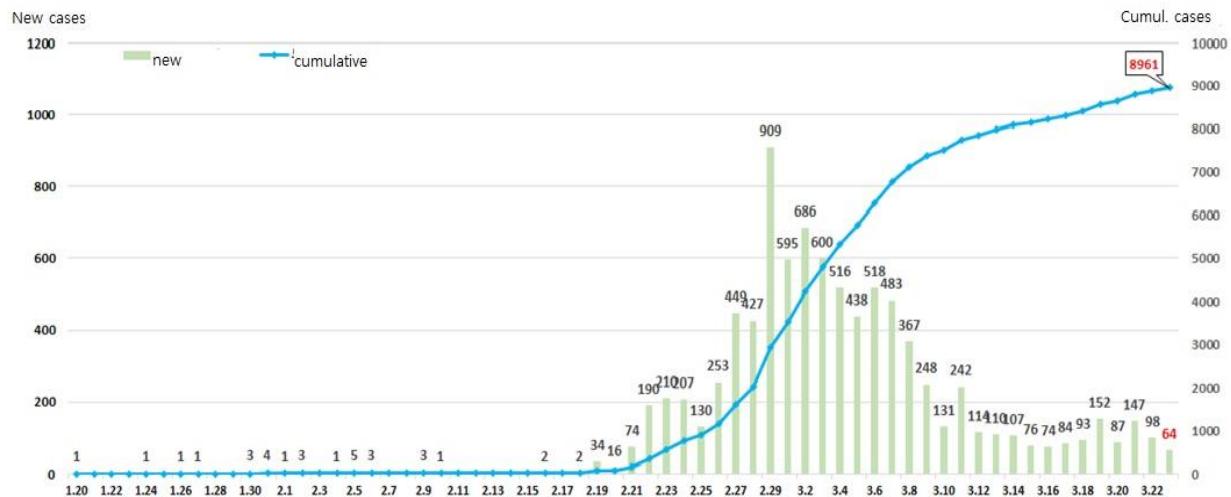
In this extreme situation, Korea is becoming a sign of hope and a model to follow. According to major media outlets around the world, “South Korea took rapid, intrusive measures against COVID-19 and they worked” (Guardian, March 20). The Fortune evaluated that “South Korea has the highest rate of testing and the most comprehensive data for coronavirus in the world” (March 19).

On February 29, the number of new cases for the day surged to 909, mainly in a specific region due to a single religious group. In just 3 weeks, however, on March 23, the number of new cases dropped to 64. So far, Korea is the only country with a population of over 50 million that has slowed the spread of the virus, and flattened the curve of new infections without shutting down the country nor the city at the epicenter of the outbreak, without imposing an extreme personal travel or movement restrictions, and without closing airports or taking other authoritarian actions.

Picture 1 President Moon Jae-in at a Special Meeting for COVID-19 Measures



Figure 1 Trend of COVID-19 in Korea: New vs. Cumulative Cases



How did Korea test more than 300,000 people? (equivalent to 6,000 per million people)

How did Korea control the COVID-19 outbreak within a month?

What is Korea's secret in tackling COVID-19?

The Korean government is receiving many inquiries about Korea's response against COVID-19. The number of inquiries that Korea can address is certainly limited as the virus continues to spread in the country. However, examining the health, quarantine and economic measures taken by the Korean government throughout different stages of the spread will provide valuable information on how to tackle COVID-19. It will be helpful to share information on the first drive-through testing in the world, rigorous epidemiological investigation using ICT, and pan-governmental cooperation at national, provincial and city levels.

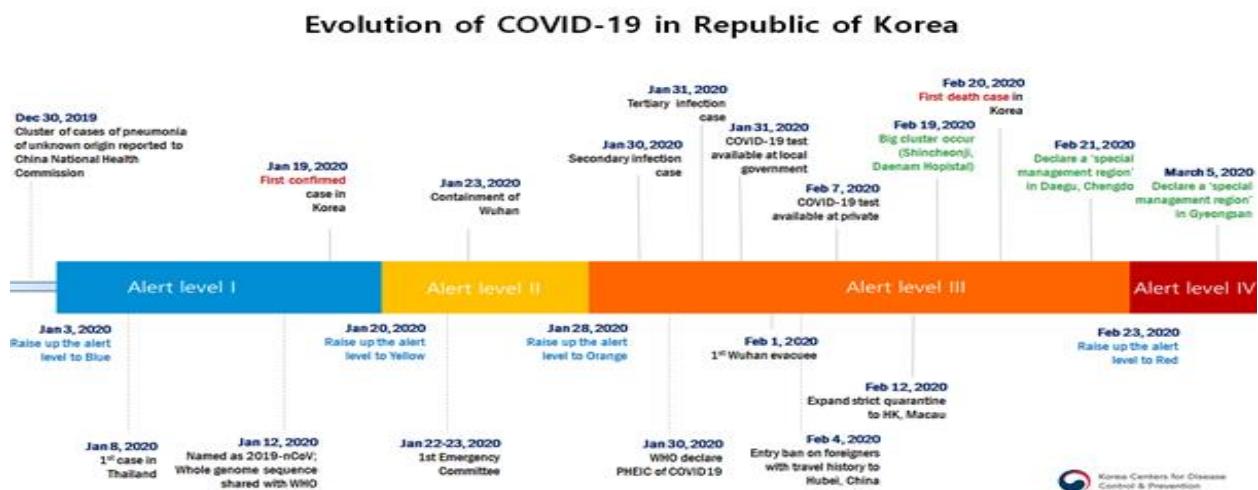
As the world has become tightly connected into a global society, the problems of one country can also greatly impact other countries through various global chains. We hope that information on Korea's measures against COVID-19 will help other governments, businesses, medical institutions and societies in finding measures to fight COVID-19.

2. COVID-19 Situation in Korea

2.1. CURRENT STATUS

As of March 23, the total number of COVID-19 cases in Korea stands at 8,961 with 111 deaths. The number of new cases per day has shown a steady decline since hitting a peak at 909 on February 29. On March 13, the number patients that recovered, tested negative and released from care has exceeded the number of new cases. Korea kept the number of new cases under 100 for four days in a row from March 18, and only 64 new cases were reported on March 23. It appears that the country has brought the outbreak under control.

Figure 2 Evolution of COVID-19 in Korea



Among all confirmed cases, 61% are females and 39% are males. The highest number of confirmed cases is among those in their 20s, followed by those in their 50s, 40s, and 60s. The fatality rate is at 1.24%, with most of the deaths found among the elderly (91% were 60 or older) or those with underlying medical conditions.

Table 1 Confirmed Cases of COVID-19 by Gender and Age

Case distribution by gender and age group:				
		Confirmed Cases (%)	Deaths (%)	Fatality rate (%)
	Total	8,961 (100)	111 (100)	1.24
Sex	Male	3,457 (38.58)	58 (52.25)	1.68
	Female	5,504 (61.42)	53 (47.75)	0.96
Age	80 and above	396 (4.42)	46 (41.44)	11.62
	70-79	599 (6.68)	38 (34.23)	6.34
	60-69	1,139 (12.71)	18 (16.22)	1.58
	50-59	1,702 (18.99)	7 (6.31)	0.41
	40-49	1,228 (13.70)	1 (0.90)	0.08
	30-39	917 (10.23)	1 (0.90)	0.11
	20-29	2,417 (26.97)	0 (0.00)	-
	10-19	460 (5.13)	0 (0.00)	-
	0-9	103 (1.15)	0 (0.00)	-

The confirmed COVID-19 cases in Korea so far have largely been accounted for by a specific region and a single religious group, Shincheonji Church in Daegu City. Few people were infected in Korea in the beginning of the outbreak, but the number jumped from a few dozen to more than 900 in late February. Evidence points to a mass gathering of thousands of Church members in Daegu on February 1 as when and where the quick spread began. Since then, the estimated 9,300 members of the Shincheonji Church in Daegu have been placed on self-quarantine and tested. All other members of the Church around the country - more than a quarter-million - have mostly been tracked, questioned, and tested as symptoms are reported.

Figure 3 Breakdown by Regions and Cluster Outbreaks

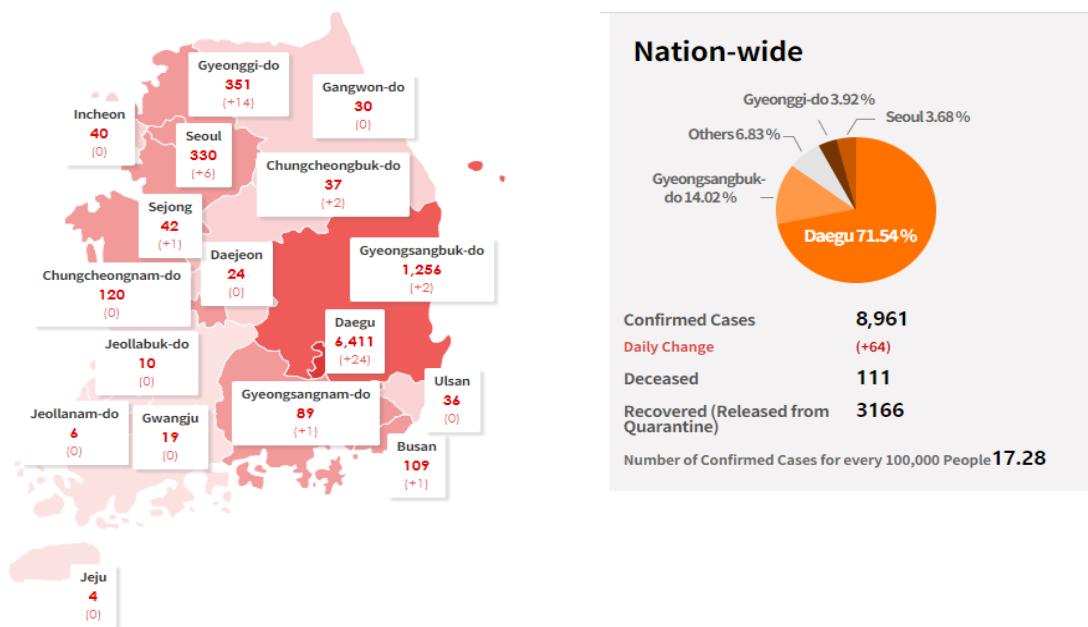


As of March 23, 56.8% of confirmed cases are linked to Shincheonji Church and 85% are residents of Daegu City and Gyeongbuk Province. The number of confirmed cases in regions outside Daegu City and Gyeongbuk Province remains at around 1,294, well within the country's capacity for disease control. Sporadic spikes in group or community transmission in other parts of the country (e.g. the recent case of a call center in suburban Seoul) are being quickly contained.

Table 2 Case Distribution in South Korea by Region

Case distribution and incidence rate by region:							
Region	# of cases	(%)	Incidence rate (per 0.1M)	Region	# of cases	(%)	Incidence rate (per 0.1M)
Seoul	330	(3.68)	3.39	Gyeonggi	351	(3.92)	2.65
Busan	109	(1.22)	3.19	Gangwon	30	(0.33)	1.95
Daegu	6,411	(71.54)	263.12	Chungbuk	37	(0.41)	2.31
Incheon	40	(0.45)	1.35	Chungnam	120	(1.34)	5.65
Gwangju	19	(0.21)	1.30	Jeonbuk	10	(0.11)	0.55
Daejeon	24	(0.27)	1.63	Jeonnam	6	(0.07)	0.32
Ulsan	36	(0.40)	3.14	Gyeongbuk	1,256	(14.02)	47.17
Sejong	42	(0.47)	12.27	Gyeongnam	89	(0.99)	2.65
Airport Screening	47	(0.52)	-	Jeju	4	(0.04)	0.60
Total		8,961	(100)			17.28	

Figure 4 Case Distribution in South Korea by Region



2.2. RESPONSE OF THE KOREAN GOVERNMENT

Since raising the national infectious disease crisis level to "serious" (on February 23, 2020), the Korean government has assembled a Central Disaster and Safety Countermeasures Headquarters (CDSCHQ), headed by the Prime Minister to double down on a government-wide response against COVID-19.

Figure 5 Response Systems of the Korean Government



Given the distinct nature and expertise involved in responding to an infectious disease, the Korea Centers for Disease Control & Prevention (KCDC) becomes the central disease control headquarters and the control tower for disease control, and spearheads the response with assistance from the Minister of Health and Welfare acting as the first deputy head for CDSCHQ and the director of the central disaster management headquarters and the chair of Central Disaster Management Headquarters. The Minister of Interior and Safety takes the role of the second deputy head and the director of the Government-wide Countermeasures Support Center, and provides necessary assistance including coordination between the central and local governments.

Each local government also forms its own Local Disaster and Safety Countermeasures Headquarters directed by the head of the local government to establish hospital sites dedicated to the infectious disease and procure sickbeds. The central government will provide assistance in terms of sickbeds, manpower, supplies, and other areas where local governments face shortages.

Picture 2 Deputy Prime Minister and Minister of Economy and Finance Hong Nam-ki is holding a meeting on COVID-19 with business leaders of Daegu City. (March 19, 2020)



3. Health and Quarantine Measures (Testing – Tracing – Treating)

3.1 TESTING for COVID-19

Measures to prevent entry of the virus

The Korean government banned the entry of travelers from Hubei, and has reinforced quarantine by expanding special entry procedures to travelers from all countries since March 19. All individuals entering South Korea including its nationals must go through heightened quarantine procedures at point of entry, including a fever test and a questionnaire. All individuals entering the country must inform immigration officials if they show symptoms of COVID-19, such as cough or fever, and report to the health authorities where they will be staying and how they can be reached. They are required to submit their self-diagnosis results via the self-diagnosis app for 14 days after arrival and to be put under intensive management (by Central Disease Control Headquarters and local governments) if they show symptoms. Those failing to submit their self-diagnosis results will be contacted and tracked.

Figure 6 Infection Control System of Korea

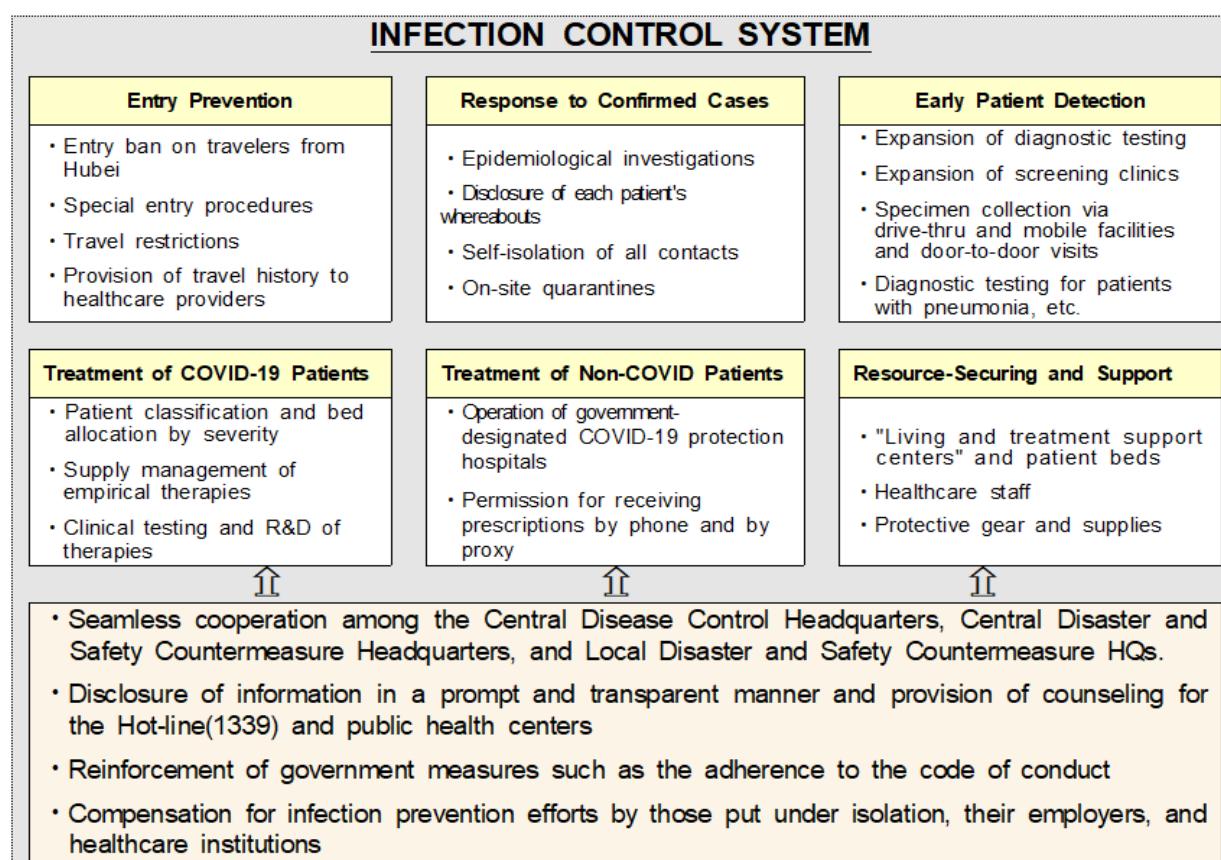
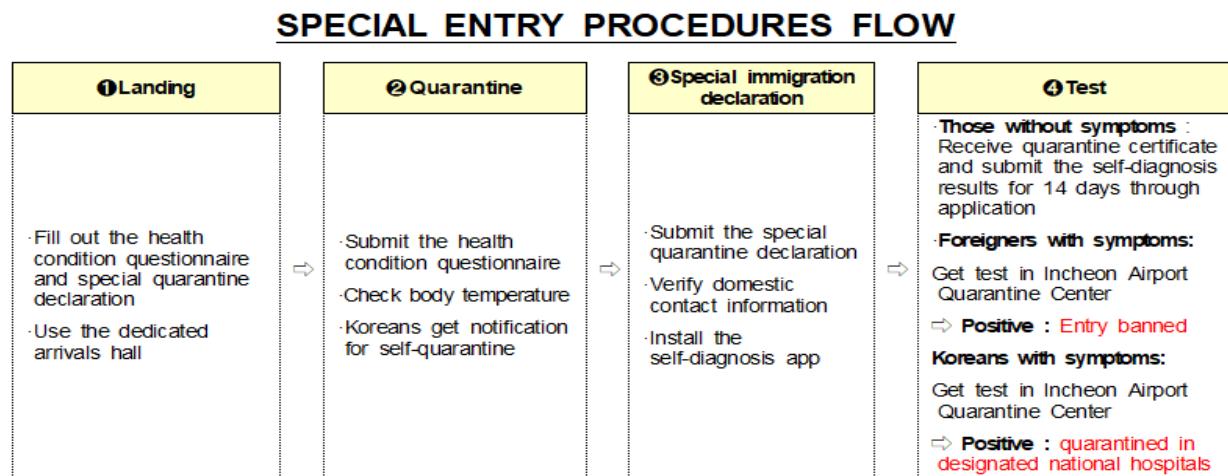
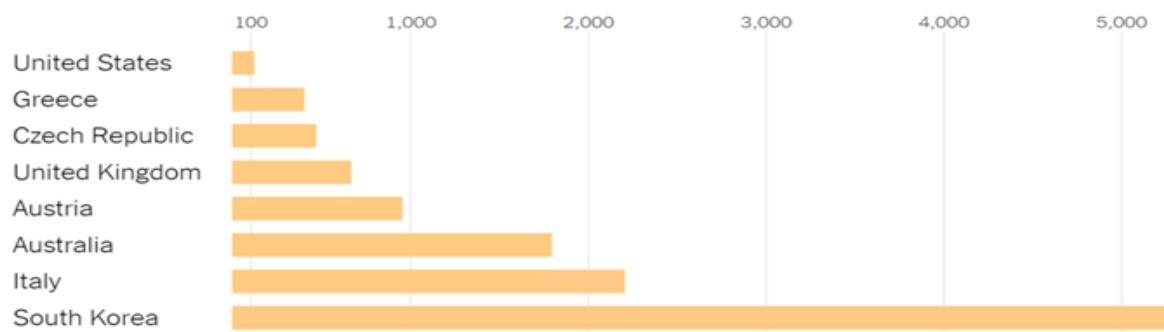


Figure 7 Special Entry Procedures Flow

Furthermore, the Korean government began testing all travelers coming from Europe and holding them for 24 hours until test results are received. Even if they test negative, all travelers must go into 14 days of self-quarantine or government quarantine.

Early detection through screening clinics and diagnostic testing

The Korean government has been conducting an impressive number of diagnostic tests within a short period of time to detect patients and to block the viral spread as early as possible (total number of diagnostic testing at 338,036 as of March 23). Korea turned to the network of public and private laboratories to develop tests. On February 4, the South Korean government granted a fast-track approval for a company's coronavirus test and began shipping the kits. A second company was approved a week later, and two more soon followed. The Korean government has continued to increase the number of testing institutions and test kit manufacturers, thereby successfully raising the maximum daily testing capacity from 3,000 (February 7) to 18,000 (March 16).

Figure 8 COVID-19 Tests per One Million People (March 17)

How to find a COVID-19 screening center

You can call the 1339 call center to get information about the nearest screening center. Korean users can visit the official COVID-19 website (<http://ncov.mohw.go.kr>) and easily find the location of screening centers. In addition, you can search for "COVID-19 screening center" in application such as Kakao Map and Tmap to automatically get directions to the nearest screening center.



Case Definitions (as of March 15, 2020)

<Confirmed case>

A person who has tested positive for the COVID-19 pathogen in accordance with testing standards, irrespective of clinical signs and symptoms.

* Testing and screening: Novel Coronavirus genetic testing (PCR), virus separation

<Suspect case>

A person who develops a fever (37.5°C and above) or respiratory symptoms (coughing, difficulty breathing, etc.) within 14 days of coming into contact with a confirmed patient while the patient was showing symptoms.

<Patients Under Investigation (PUI)>

- ① A person who is suspected of having the COVID-19 virus as per doctor's diagnosis due to pneumonia of unknown causes.
- ② A person who develops a fever (37.5°C and above) or respiratory symptoms (coughing, difficulty breathing, etc.) within 14 days of travelling to a country with local transmissions* of COVID-19, such as China (including Hong Kong and Macau).
- * Refer to the WHO website (local transmission) or the KCDC website
- ③ A person with an epidemiologic link to the collective outbreak of COVID-19 in Korea, who develops a fever (37.5°C and above) or respiratory symptoms (coughing, difficulty breathing, etc.) within 14 days

Guidelines for Persons Symptomatic of COVID-19

If you suspect that you may have been infected by COVID-19, refrain from going outside and call a clinic or the Hot-Line (1339 or region code + 120). Foreign language are available.

Follow the directions given by the 1339 call center, wear a face mask and visit a health care facility equipped with a screening center. Upon arrival, notify the medical staff of your travel history abroad.

The Korean government has also set up screening clinics* at public health centers and healthcare institutions to ensure easy access to diagnostic testing and to limit the spread of the virus. It has diversified their operating models to respond more effectively to the increasing demand for diagnostic testing.

* Screening clinics are dedicated to testing those with suspected symptoms such as cough or fever to eliminate the possibility of contaminating healthcare institutions.

The Korean government is also collecting testing specimens through about 50 drive-through centers, mobile facilities and door-to-door visits to ensure greater efficiency and safety. This not only minimizes both the pressure on the hospitals and the risk of transmission by keeping potential patients out of hospital waiting rooms, but also reduces time by eliminating the need for the disinfection measures required for sample-taking within a hospital.

3.2 TRACING COVID-19

Conducting rigorous epidemiological investigations

The Korean government is undertaking vigorous measures to track and test those who had been in contact with confirmed patients, utilizing credit card transactions, CCTV recordings and GPS data on mobile phones when necessary. Relevant anonymized information is disclosed to the public so that those who may have crossed paths with confirmed patients may get themselves tested. The close contacts identified through epidemiological investigations are put under self-quarantine and monitored one-on-one by staff of the Ministry of Interior and Safety and local governments.

To rapidly complete epidemiological investigations, preliminary investigations of individual cases are conducted by local governments. The central immediate response teams of the KCDC are dispatched to regions experiencing massive outbreaks and conduct epidemiological investigations jointly with each local government team in charge.

- * Screening clinics are dedicated to testing those with suspected symptoms such as cough or fever to eliminate the possibility of contaminating healthcare institutions.

Hospitals and pharmacies have been granted access to patients' travel histories to a select number of highly affected countries and areas such as China, Japan, Iran and Italy to aid in the screening of suspected cases of COVID-19 infection.

The extensive screening goes so far as to conduct postmortem diagnostic tests on deaths with unknown causes if the deceased had shown symptoms of pneumonia or other possible markers that point to COVID-19 infection. When confirmed, the Korean government tracks and monitors all those who had been in close contact with the deceased before death.

Monitoring of Contacts

The close contacts under self-quarantine are linked to their one-on-one assigned government staff through an innovative 'safety protection app,' which allows the staff to monitor their symptoms twice a day, and be alerted when self-quarantine orders are broken. This tracking of the phone's GPS location is done only with the consent of the close contacts.

Those under self-isolation are banned from leaving the country regardless of whether or not they develop symptoms. Those violating self-isolation will be imposed with a fine of KRW 10 million or less, or imprisonment for one year or less.

3.3 TREATING COVID-19

Establishment of Patient Management System

Table 3 Establishment of Patient Management System

Treatment System Based on Severity	Classify patients based on severity (mild, moderate, severe and extremely severe)	
	Mild cases are isolated and monitored at living and treatment support centers	Moderate, severe, and extremely severe cases are immediately hospitalized for treatment
Securing Beds For Hospitalized Treatment	Beds at government-designated institutions for hospitalized treatment, regional hub hospitals, and national infectious disease hospitals are allocated to confirmed cases	
	60 infectious disease hospitals designated	
	Continually securing additional beds	
Providing Healthcare Staff and Protective Gear	Recruiting healthcare specialists via a range of channels and methods	
	Protect healthcare staff by self-isolation, infection control services and financial compensation	
	Distribution of the government reserves of protective equipment to local governments and government-designated institutions for hospitalized treatment	
Managing Medicinal Supplies and Developing Vaccines and Therapies	Supply management of empirical therapies and sharing distributor information	
	Clinical testing and R&D of vaccines and therapies in collaboration with the private sector	

To hospitalize patients with severe symptoms and provide appropriate treatment options to other confirmed cases, the Korean government is classifying patients based on severity, and accommodating them accordingly at hospitals or living and treatment support centers.

First, confirmed patients are diagnosed at public health centers by healthcare specialists in the city, and then classified based on severity (mild, moderate, severe, and extremely severe) by the patient management teams at province-level.

Moderate, severe, and extremely severe patients are immediately hospitalized for treatment (at national infectious disease hospitals and other government-designated institutions for hospitalized treatment).

* The National Medical Center (Patient Transfer Support Center) coordinates patient transfers between cities and provinces when patient beds are in short supply in certain regions.

Patients showing mild symptoms are isolated at living and treatment support centers* and are monitored by healthcare staff at least twice a day to be readily transferred to healthcare institutions if symptoms aggravate, or to be discharged based on relevant standards when symptoms are mitigated (in about three weeks).

* City and provincial governments designate government-run facilities or lodgings as living and treatment support centers, and provide a relief kit (underwear, toiletries, masks, etc.) and a hygiene kit (a thermometer and medicine).

Beds at government-designated institutions for hospitalized treatment, regional hub hospitals, and national infectious disease hospitals are being allocated to confirmed patients. The central and local governments have designated 69 infectious hospitals. Existing inpatients at these institutions have been transferred to other hospitals to make wards available exclusively to COVID-19 patients. The government is continually securing additional beds, and plans to secure 254 more beds by end of March for patients with severe symptoms, in addition to existing 198 beds at 29 hospitals.

In order to support patient care and infection control for different regions. the Korean government is aggressively recruiting healthcare specialists via a range of channels such as requesting staff members from other institutions and stationing them at healthcare institutions in need, mainly in Daegu City and Gyeongbuk Province. To secure additional healthcare staff, 750 new public health doctors have been appointed and stationed, and nurses are continually being recruited. The government puts health care staff under paid self-quarantine after two weeks in order to protect them, and replaces them with other staff, providing infection control services as well as financial compensation. Furthermore, the government has distributed the government reserves of protective equipment to local governments and government-designated institutions for hospitalized treatment, with priority given to Daegu and Gyeongbuk Province.

The government is managing the supply of empirical therapies and securing additional imports as recommended by experts, while also sharing distributor information.

* Four major drugs including Kaletra Tab are available, and more will be imported (in March and May).

In addition, the Korean government is currently pushing ahead with clinical testing and R&D of vaccines and therapies in collaboration with the private sector. Research on diagnostic agents, therapies, clinical epidemiology, and vaccines is to be conducted through the distribution of research resources (from February 2020 onwards), notification of research tasks, conducting of emergency response research, and cooperation with the private sector.

Realignment of Healthcare Institution Use System

The Korean government is trying to ensure hospital accessibility and safety for non-COVID-19 patients by separating areas for respiratory patients and non-respiratory patients. As of March 23, 329 hospitals have been designated as COVID-19 protection hospitals. Also, the government has permitted non-respiratory patients to receive counseling and prescriptions by phone and by proxy to prevent infection within healthcare institutions.

Pneumonia patients are put through diagnostic testing before being allowed to be hospitalized or enter an ICU to detect confirmed cases before they lead to infection within healthcare institutions. Suspected cases are required to undergo testing in a separate area before being allowed to enter the emergency center.

To reinforce infection control within healthcare institutions, the Korean government is providing infection control guidelines to healthcare institutions and focusing on expanding cooperation and communication with the health care circles. Healthcare institutions are required to provide patients with guidance on hygiene, restrict the entry of visitors and visiting conditions, check each visitor's body temperature, and mandate the wearing of masks. Staff members are required to wear masks while on duty and immediately report to public health centers or 1339 if a patient falls into any of the predefined categories (confirmed cases, contacts of confirmed cases showing related symptoms, suspected cases based on medical opinions, etc.), and are excused from work for 14 days when they show signs of illness such as a fever and cough. An infection control staff member is designated at each health care institution to ensure the application of infection prevention measures and reinforced monitoring.

4. Economic and Financial Measures

President Moon Jae-in spoke at the roundtable with principal business and labor leaders on March 18, 2020. "The COVID-19 outbreak is simultaneously impacting supply and demand and causing a multi-crisis for the real economy and finance. As the entire world is going through this problem, the economic crisis is highly likely to be prolonged. In particular, as it is unfolding in ways completely different from past economic crises, we need unprecedented countermeasures."

Picture 3 President Moon spoke at the roundtable with business and labor leaders (Mar 18)



With the spread of COVID-19, the Korean economy is facing a crisis of unprecedented contraction. In trying to overcome the downturn by utilizing both fiscal and monetary policies, the government has utilized the reserve funds and supplementary budget to prepare economic policies for over 50 trillion won, which includes various support for people's livelihoods.

Korea's economic policy against COVID-19 can be summarized into the first, second and third financial support packages, which include a supplementary budget and the lowering of the base rate. In addition, the government raised forex futures trading limits and signed currency swaps with other countries to manage foreign exchange rate.

Table 4 Major Government Economic Measures against COVID-19

Feb 5 ~ Feb 12	Announcing the First “Financial Stimulus Package”
Feb 28	Announcing the Second “Financial Support Package”
March 16	Lowering Base Interest Rate
March 17	Passing Supplementary budget
March 18	Raising Forex Futures trading limits
March 19	Announcing the Third “Financial Stimulus Package”
	Sign currency swap with US
	Launch of Emergency Economic Council Meeting

4.1 FIRST FINANCIAL STIMULUS PACKAGE (February 5 ~ 12)

The Korean government prepared several emergency support measures for a total of 4 trillion won through the 2nd to 4th Ministerial Meetings on Boosting the Economy. The following is a summary of the first economic support package against COVID-19.

Table 5 Key Financial Measures announced at the Economic Ministerial Meetings

2nd Ministerial Meeting on Economic Resilience (Feb 5)	Policy support related to internal and local tax
	Support for supply and demand of sanitary and medical supplies
	Helping to expedite customs procedures for raw and sub-materials
3rd Ministerial Meeting on Economic Resilience (Feb 7)	Emergency relief fund for affected SMEs (via loans, guarantees and import – and - export financing)
	Expanding lending support for Micro-business owners (via loans and guarantees)
	Enhancing monitoring of unfair trading practices in the capital market
4th Ministerial Meeting on Economic Resilience (Feb 12)	Underwriting greater level of accounts receivable insurance and lowering insurance premiums
	Helping group import and to identify alternative procurement countries for raw and sub-materials
	Enlarging financial support for SMEs and micro-business owners

4.2 SECOND FINANCIAL STIMULUS PACKAGE (February 28)

The Korean government unveiled its second comprehensive support package against COVID-19, resulting in a total of 20 trillion won of support together with the first package. A summary of the second support package is as follows.

Support package of over 20 trillion won including supplementary budget

- 4 trillion won including government reserve funds and policy financing to support disease prevention, local governments, imports of manufacturing supplies and small merchants
- 7 trillion won to provide financial and tax support for families and businesses affected, including 50 percent income tax cuts given to landlords for rent reduction and individual consumption tax cuts for car purchases to boost consumption
- 9 trillion won of loans, guarantees and investment through financial institutions and public institutions
- Supplementary budget to support local economies, as well as disease control

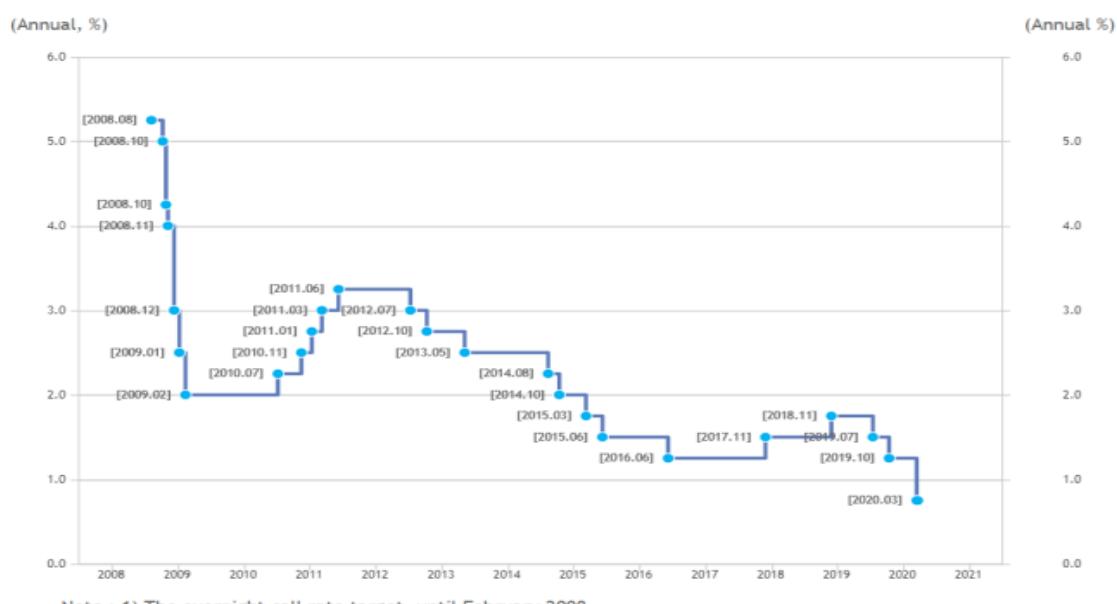
Table 6 10 Government Spending Principles on COVID-19

①	Support a careful and proper disease control and prevention
②	Provide as many as 7 million masks for people in Daegu City and Cheongdo County
③	Promote the lowering of commercial rents by providing landlords with a 50 percent income tax break for the discount in the first half
④	Provide a VAT break for businesses earning 60 million won or less a year
⑤	Help small merchants and SMEs with their business operation: Considerably expand the Special Financial Support for Small Merchant and SMEs ^[2]
⑥	Provide employment support for businesses hit hard, such as tourism
⑦	Increase the issuance of local gift certificates this year by 3.5 trillion won to help local economies and traditional markets
⑧	Give parent employees up to 5 days of childcare leave along with the pay of 50,000 won per day
⑨	Promote consumption: Give a 70 percent individual consumption tax cut for car purchases, and a 10 percent refund for the purchases of high energy-efficiency home appliances
⑩	Promote consumption by issuing discount coupons to be used for purchasing cultural events and farm products, as well as for tourism expenses and paychecks

4.3 LOWERING THE BASE RATE (March 16)

The Monetary Policy Board of the Bank of Korea decided to lower the Base Rate by 50 basis points from 1.25% to 0.75%, effective March 17. In a related set of actions, the Board has decided to lower the interest rate on the Bank Intermediated Lending Support Facility from 0.50%-0.75% to 0.25%, effective March 17. To manage the liquidity in the financial market at a sufficient level, the Board will also broaden the eligible collateral for open market operations to include debentures issued by banking institutions.

Figure 9 Base Rate of Korea



4.4 SUPPLEMENTARY BUDGET OF 11.7 TRILLION WON (\$10 billion) (March 17)

The 2020 supplementary budget of 11.7 trillion won (10.9 trillion won for new spending and 0.8 trillion won for revenue adjustment) was passed on March 17.

- 1 trillion won to be spent on disease prevention and treatment
- 4.1 trillion won to be spent on small business loans
- 3.5 trillion won to be spent on household support, including daycare vouchers and emergency livelihood support
- 1.2 trillion won to be spent on the local economies hit hard

* In particular, special management areas (Daegu City and Gyeongbuk Province) will benefit 1.7 Trillion won from the amount above.

4.5 RAISING FOREX FUTURES TRADING LIMITS (March 18)

Although its banks have maintained a relatively high level of FX liquidity, Korea aims to be prepared for a sudden volatility in the FX swap market. The government has decided to raise the forex futures trading limit by 25 percent, to 50 percent for local banks and 250 percent for foreign bank branches from March 19.

Picture 4 Vice Minister Kim Yongbeom is making the opening speech at the Macroeconomic and Financial Market Committee (March 16, 2020)



4.6 THIRD FINANCIAL STIMULUS PACKAGE (March 19)

The Korean government announced an over 50 trillion won worth of financial support package on March 19 to help businesses and households affected by the COVID-19 outbreak. The package is composed of programs designed to help maintain businesses, ease the burden on borrowers and avoid credit crunch. The following is the 9 programs that the third financial support package contains.

Table 7 Key Points of the Third Financial Package

1. Help maintain business	- Provide small businesses with liquidity: A total of 12 trillion won to be spent on emergency funding for business operation and low interest rate loans (1.5%, lower than ordinary rates by an average of 2.3% points)
	- Provide special guarantees on SME and small business loans: 5.5 trillion won worth of guarantees to be provided through Korea Technology Finance Corporation, Korea Credit Guarantee Fund and local credit guarantee foundations
	- Provide a 100 percent loan guarantee worth 3 trillion won for small merchants
2. Ease the burden on borrowers	- Defer loan repayment for SMEs and small businesses: At least six months of deferment to be offered by banks and nonbanking financial institutions
	- Suspend loan interest payments for SMEs and small businesses: For six months starting on April 1
	- Support debt workout programs: Debt relief programs at Credit Counseling and Recovery Service, and outstanding debt purchases by Korea Asset Management Corporation
3. Avoid credit crunch	- Use Bond Market Stabilization Funds to provide liquidity to corporations
	- Issue a total of 6.7 trillion won worth of P-CBOs over the next three years
	- Create an equity market stabilization fund: A temporary fund jointly invested by the financial sector, designed to be invested in equity index products

* Decisions yet to be made on the sizes of the Bond Market Stabilization Funds and the equity market stabilization funds

4.7 BILATERAL CURRENCY SWAP WITH THE FED (March 19)

The Bank of Korea and the Federal Reserve will establish a temporary bilateral currency swap arrangement (swap line) to provide U.S. dollar liquidity. This new facility between the Bank of Korea and the Federal Reserve will support the provision of U.S. dollar liquidity up to 60 billion USD in exchange for Korean won, and will be in place for at least six months. This facility is designed to help lessen strains in U.S. dollar funding markets, thereby mitigating the effects of these strains on the supply of credit to households and businesses.

5. Conclusion

In January 2020, COVID-19 was a challenge for only few countries such as China, Iran, and Korea. Two months later, it has become the biggest health and economic threat for all of humanity. What is Korea's secret in tackling this challenge? Despite the international community's interest in Korea's action to contain the coronavirus spread, the fight is now over, and there is still the risk of resurgence. Therefore, while it is premature to provide answers to the questions raised in the Introduction of this Working Paper, three actions of the Korean government can be highlighted.

The first is speedy and swift action. Just one week after the country confirmed its first case on January 27, government officials met with representatives from several medical companies. In late January, Korea's CDC approved a diagnostic testing set of a company. Another company followed soon after. By February, Korea made an international headlines for its very first drive-through screening centers and the ability to test thousands of people each day. It is critical to act quickly before the situation aggravates.

The second action can be summarized into 3 T's. These are: 1) widespread *Testing*, 2) contact *Tracing* and 3) rigorous *Treating*. You cannot fight what you cannot see. Korea has tested more than 350,000 people as of March 24, 2020 and identified over 9,000 cases, far more than any other countries. This helped the health and quarantine authority isolate and treat many people soon after they are infected. Once an individual tests positive, the health authority retraces the patient's recent course of movement to find and isolate others who came in close contact with the patient using security camera footages, credit card transactions and even GPS data on the patient's cars and cellphones. Finally, the health authority classifies confirmed cases into four groups based on severity from 1) Mild, 2) Moderate, 3) Severe and 4) Extremely Severe. The moderate, severe and extremely severe cases are hospitalized immediately for intensive care until patients fully recover from the virus.

And the third action is public-private cooperation and civic awareness. The most important secret in the fight against the coronavirus is the citizens. There would not be enough medical personnel to measure the health conditions and body temperatures of all citizens if the virus had spread nationwide. The high level of civic awareness and voluntary cooperation is the most important measure in preventing the spread and fight against the coronavirus.

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Annex

1. EVOLUTION OF COVID-19 IN KOREA

Dec 30, 2019	Cluster of cases of pneumonia of unknown origin was reported to China National Health Commission
Jan 3, 2020	Korean government raised the alert level to Blue(level 1 out of 4-level national crisis management system)
Jan 12, 2020	Coronavirus was named as 2019-nCoV, and Chinese scientists shared the genetic sequence of the virus internationally.
Jan 19, 2020	First confirmed case of Coronavirus, a 35-year-old female, Chinese national, residing in Wuhan, Hubei province. She was detected with fever upon arrival at the Incheon international airport, and was confirmed positive for coronavirus.
Jan 20, 2020	Korean government raised the national alert level to Yellow (level 2)
Jan 23, 2020	Chinese government locked down Wuhan, the center of the outbreak.
Jan 28, 2020	Korean government raised its infectious disease alert level to Orange (level 3).
Jan 30, 2020	WHO declared the coronavirus, global public health emergency
Jan 31, 2020	COVID-19 test kits based on the virus' genetic code released by China had been distributed to local government labs across the South Korea.
Feb 4, 2020	Korea began banning entry of all foreign nationals who have been to China's Hubei province in the past two weeks
Feb 7, 2020	COVID-19 test kits became available in private hospitals.
Feb 12, 2020	WHO declared an official name for the new coronavirus - COVID 19
Feb 20, 2020	Number of confirmed cases in Korea reached 100, and first death case occurred.
Feb 21, 2020	Korean government declared 'Special Management Region' in Daegu and Chengdo.
Feb 23, 2020	Korean government raised its infectious disease alert level to Red(level 4) and ordered schools to start the new semester one week later on Mar 9, from Mar 2.
Mar 1, 2020	Korean government divided confirmed patients into four groups and only the sickest and elderly were sent to hospitals. The young and asymptomatic went to dormitories.
Mar 2, 2020	Korean government delayed the start of new semester to Mar 23.
Mar 4, 2020	Korean government proposed the 11.7 trillion won worth of extra budget bill.
Mar 5, 2020	Korean government declared 'Special Management Region', Gyeongsan.
Mar 9, 2020	Korean government applied special entry procedures for Japan.
Mar 10, 2020	A cluster of confirmed cases appeared in a Seoul call center.
Mar 11, 2020	WHO declared COVID-19 a pandemic
Mar 17, 2020	Korean government delayed the start of new semester to Apr 6.
Mar 19, 2020	Korean government applied special entry procedures for all foreigners.
Mar 22, 2020	Korean government began implementing stricter rules on social distancing

2. LIST OF PUBLIC HEALTH MEASURES

1. Code of Conduct for the Public	<p>The Korean government is guiding the public to refrain from attending social gatherings and coming into direct contact with others, eat nutritionally balanced meals, ventilate indoor spaces sufficiently, etc.</p> <p>If any signs of a cold are detected, the public is asked to observe their symptoms for three to four days and inquire with a public health center or the KCDC call center. If the need arises, they should visit a screening clinic (do not use public transportation). They should go to a COVID-19 protection hospital for respiratory symptoms and use phone counseling service for non-respiratory diseases.</p> <p>Citizens are strongly urged to stay at home, except for essential needs or jobs, with the government restricting religious gatherings, indoor sport activities and attendance at entertainment facilities, such as night clubs are karaoke rooms.</p>
2. Latest Information in a Transparent Manner	<p>Domestic law (Infectious Disease Control and Prevention Act) ensures the public's right to be informed about the latest developments of and responses to outbreaks and infection control. The government also mandates the disclosure of the whereabouts, means of transportation, healthcare institutions visited, and contacts of confirmed cases.</p>
3. Mild Cases and Treatment Support Centers	<p>Once public health centers or city- and province-level patient management teams classify patients based on severity (mild, moderate, severe, and extremely severe), all cases excluding mild cases are immediately hospitalized, and mild cases are transferred to living and treatment support centers.</p> <p>Healthcare staff conducts monitoring of mild cases at least twice a day. If symptoms aggravate, they are immediately transferred to healthcare institutions. When symptoms are mitigated, they are discharged based on relevant standards (about three weeks).</p>
4. Aggressive Inspections of High-risk Groups of 'Shincheonji' Church Members	<p>The list of 'Shincheonji' Church members nationwide was provided to all local governments including Daegu to identify confirmed cases and rapidly conduct tests on those with symptoms.</p> <p>In order to prevent any Daegu residents from being disadvantaged by the testing of 'Shincheonji' Church members, those with symptoms are guided to undergo diagnostic tests at screening clinics. The government is making door-to-door visits to conduct diagnostic testing for seniors and those with underlying health issues.</p>
5. Hospital Beds and Healthcare Staff	<p>Government offices and hospitals across South Korea have offered space and medical services in their areas to solve the shortage of hospital beds and isolation facilities to treat coronavirus patients in Daegu. Moreover, physicians and nurses are being recruited from public hospitals, etc., and dispatched to Daegu on a continual basis.</p>

3. SUMMARY OF ECONOMIC MEASURES AGAINST COVID-19

1. Small- and medium-sized enterprises (SMEs) and Micro-business owners

<u>Fiscal support</u>	<u>Tax relief</u>
<ul style="list-style-type: none"> Support programs provided to normalize the operations of affected stores that were visited by confirmed patients Support for rental fees for micro-business owners (providing a 50 percent tax relief cut when building owners reduce rental fees for micro-business owner tenants, and rental fees cut for buildings owned by the government and public organizations) Emergency relief fund for affected SMEs 	<ul style="list-style-type: none"> Extending the deadline of filing and paying internal and local tax returns, postponing tax investigations, and applying a grace period for collecting taxes and any arrears Reducing the tariff for the emergency procurement of key parts via airlines
<u>Financial support</u>	<u>Administrative support and other support</u>
<ul style="list-style-type: none"> Expanding lending support (via loans and guarantees) Underwriting greater level of accounts receivable insurance and lowering insurance premiums Enlarging the size of P-CBO issuance and relaxing its requirements 	<ul style="list-style-type: none"> Expediting customs procedures for raw and sub-materials, and helping to identify alternative procurement services Streamlining importing screenings Extending contract/delivery periods for goods procured by the government

2. Export Industries

<u>Fiscal support</u>	<u>Tax relief</u>
<ul style="list-style-type: none"> Offering exporting vouchers Helping to establish online exhibitions 	<ul style="list-style-type: none"> Prolonging the deadline for tariff collections, and allowing payments in installments Expediting tax refunds Putting off tariff investigations
<u>Financial support</u>	<u>Administrative support and other support</u>
<ul style="list-style-type: none"> Repaying bankruptcies filed by insolvent exporting companies Reducing the spread on deferred payments of bills bought in foreign currency Extending the expiration period of import L/C 	<ul style="list-style-type: none"> Operating trouble-shooting help centers

3. Local Economy

<u>Fiscal support</u>	<u>Tax relief</u>
<ul style="list-style-type: none"> Emergent budget execution in local areas for the first of this year Issuing additional local gift certificates and offering a larger discount on them Designating areas for special management such as Daegu and North Gyeongsang Province, and providing special support worth 1.7 trillion won 	<ul style="list-style-type: none"> Suspending tax investigations in local areas Helping to pay local taxes in installments and postponing due dates for tax payments
<u>Financial support</u>	<u>Administrative support and other support</u>
<ul style="list-style-type: none"> Applying the prime rate on initial lending Backing local governments and municipalities that are propping up local SMEs (through loans and guarantees) 	<ul style="list-style-type: none"> Reducing the bidding time period when purchasing masks Running an on-site center and an inspection force for reporting unfair practices pertaining to sanitary aid and quarantine products

4. Airline and Shipping Industries

<u>Fiscal support</u>	<u>Support for fees and penalties</u>
<ul style="list-style-type: none"> Lowering the usage rate of port and airport facilities Reducing rental fees for passenger terminals 	<ul style="list-style-type: none"> Extending the deadline for penalty payments newly incurred by airliners Longer period for reducing fees for Aircraft Certification Systems (ACS)
<u>Financial support</u>	<u>Administrative support/Miscellaneous</u>
<ul style="list-style-type: none"> Emergency lending targeting LCCs, passenger ships, and stevedoring companies Introducing a public guarantee program on operational leases for airliners Injecting liquidity when companies confirm a reduction in freight or cargo volume 	<ul style="list-style-type: none"> Postponing the retrieval of unused operation rights/slots, and increasing per-time slots Distributing operational rights for mid- and long-distances, and helping to open non-service routes Extending the due date for vessel screenings

5. Tourism, Restaurant and Service Industries

<u>Fiscal support</u>	<u>Tax relief</u>
<ul style="list-style-type: none"> Pushing ahead with modernizing facilities including tourism special zones and cultural properties Easing requirements for subsidies for employment stability Providing disinfection services to companies that confirmed patients visited 	<ul style="list-style-type: none"> Cutting asset taxes imposed on accommodative facilities Extending the due date of patent rights payments from duty free shops and permitting installment payments
<u>Financial support</u>	<u>Administrative support/Miscellaneous</u>
<ul style="list-style-type: none"> Temporarily introducing preferential non-collateral financing Greater coverage for general loans and applying the prime rate to more borrowers 	<ul style="list-style-type: none"> Helping to address disputes related to cancellations and requesting refunds Distributing posters explaining tailored responses to dining industries

6. Workers / Consumers

<u>Fiscal support</u>	<u>Tax relief</u>
<ul style="list-style-type: none"> Adopting five consumption coupons (for jobs, vacation, cultural events, tourism, and childbirth) Providing support for living expenses for vulnerable groups Expanding support for employees suffering from delayed wages Granting living expenses for the self-quarantined 	<ul style="list-style-type: none"> Temporary increases in tax relief for the special excise tax and income tax Putting off the period of value-added tax refunds targeting hotels accommodating foreign tourists
<u>Financial support</u>	<u>Administrative support and other support</u>
<ul style="list-style-type: none"> Strengthening financing for living expenses for job seekers 	<ul style="list-style-type: none"> Escalating support for costs related to civil litigations for pursuing unpaid wages Further vocational training for job seekers

4. PUBLIC ANNOUNCEMENT POSTERS ON COVID-19

 질병관리본부
KCDC

 해외고열병
NOW
질병관리본부 출판부

Recommendations for preventing **Medical Institution COVID-19**

To Public!

When you visit medical institutions



If you are a **suspected COVID-19 patient**,
use **selected clinic**

*Selected clinic information: Check out KCDC homepage,
Call local Health centers or call 1339 or your area code + 120



If possible, use your own car
when visiting **selected clinics**,
and be sure to wear a mask
when using public transportation



**Avoid contact with others until
you receive the results of the test.**

To Medical Staff!

**When respiratory patients visit
your medical institution**



When you are **treating respiratory patients**,
be sure to **wear masks or other protective gears**



**When suspicious respiratory patients visit
your medical institution,
conduct screening medical treatment thoroughly**

(Ask travel history and use DUR and ITS, etc.)



If your patient is suspected of
being infected with COVID-19
report to your local public health center



Guideline for Self-quarantine Patient



Avoid outdoor activities to prevent the transmission of infection

※ If you are in self-quarantine, please cooperate in preventing transmission of infection under
Infectious Disease Control and Prevention Act*.
* You could be fined up to 3 million won by the Article 80 (Penalty).



Stay alone in an isolated place

- Keep the door closed and open the window frequently to ventilate.
- Eat by yourself.
- If possible, stay in the place with a bathroom and sink that you can use alone.
(If you share a bathroom and sink, disinfect them after use with a home disinfectant such as chlorine bleach.)



If you need to go out to see physicians or for other inevitable reasons, you must contact the local public health center (the public health officer in charge) first



Avoid contact with family members or cohabiters (speaking, etc.)

- If inevitable, do not face one other, wear masks, and keep your distance at least two meters.



Use personal items (personal towel, utensils, mobile phone, etc.)

- Do not wash your clothes and bedding with others.
- Make sure no one uses your personal items before washing them separately.



Comply with the health guidelines

- Follow personal hygiene practices (washing hands, sanitizing, etc.)
- Wear a mask when coughing.
- If you don't have a mask, cover your mouth and nose with your sleeve when coughing.
- Wash or sanitize hands after coughing or sneezing.

While you are in self-quarantine, your local public health center (the public health officer in charge)
will contact you to check your symptoms and conditions

Please monitor and record your symptoms until you are released from quarantine.

How to monitor symptoms

- ✓ Take the temperature every morning and evening
- ✓ Check your health condition for any symptoms of infection, such as respiratory symptoms,
and record them on the monitoring form (Form 6)
- ✓ Inform your local public health center (the public health officer in charge)
of your temperature and symptoms when they contact you(2 times a day or more)

Major Symptoms of COVID-19

- ✓ Fever (over 37.5 °C)
- ✓ malaise
- ✓ Sore throat
- ✓ Respiratory symptoms (cough, difficulty in breathing, etc.)
- ✓ Pneumonia



Guidelines for family and cohabiters of a self-quarantined person

- Avoid contact with the person who is in self-quarantine as much as possible.**
 - Contact is strictly prohibited for those with lowered immunity, including seniors, pregnant women, children, sufferers of chronic diseases and cancer, etc.
 - Restrict visitors
- If you can't avoid being in contact,
wear a mask and keep at least 2 meters distance.**
- Stay in an area independent from self-quarantine area,
and ventilate the shared area frequently.**
- Wash hands frequently using water and soap or hand sanitizer.**
- Use personal items separately. (tableware, cup, towel, bedding, etc.)**
 - Wash clothes and bedding of suspected infectee separately from others'
 - Separate tableware of suspected infectee, so others don't use it before it is cleaned.
- Clean the surface that is frequently touched,
such as table top, doorknob, bathroom tools, keyboard, bedside table, etc.**
- Pay a close attention to the health condition of suspected infectee.**

Major Symptoms of COVID-19

- Fever (over 37.5 °C)
- Respiratory symptoms (coughing, sore throat, etc.)
- Pneumonia

2020.02.26



Do you have any question about infectious disease or other diseases?

Don't worry even if you do not speak in Korean.
For more information on disease, please call at 1339!



Q. Can foreigners use 1339 Call Center too?

1339 call center is available on interpretation service, cooperation with **1330**(Korea Tourism Organization), **1345**(Immigration Contact Center), etc.

1330 service

24 hours available | Korean, English, Chinese, Japanese
08:00~19:00 | Vietnamese, Thai, Malay, Russian

1345 service

24 hours available | Korean, English, Chinese
09:00~18:00(Weekdays) | 14 languages including Vietnamese, Thai and Japanese

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질병관리본부
KCDC

COVID-19 – Correct methods of wearing a mask

“Wearing a mask can prevent infectious diseases.”

- 1 Wash your hands thoroughly with soap and running water**
before putting on a mask.
- 2 Place the mask tightly on the face, fully covering your mouth and nose.**
- 3 Do not put a towel, tissues, etc. in the mask.**
- 4 Do not touch the mask while wearing the mask.**
If you do, wash your hands thoroughly with soap and running water.
- 5 Wash your hands with soap and running water** after removing the mask,
and remove the mask by touching its straps only.

A fold-type mask

- ①  Unfold the mask and round the side edges.
- ②  Ensure its nose wire is facing upwards, fully covering your nose and mouth.
- ③  Put the ear loops around your ears.
- ④  Use both hands to pinch the nose wire around your nose.
- ⑤  Keep the mask fit tightly on your face, checking air leakage.

A cup-type mask

- ①  Gently hold the mask in your hand, letting the headbands hang downwards.
- ②  Place the mask on your face, covering your nose and chin.
- ③  Pull the top strap over your head and secure it around the crown of your head.
- ④  Pull the bottom strap over your head and secure it on the back of your neck with a holding device.
- ⑤  Use both hands to pinch the nose wire around your nose.
- ⑥  Keep the mask fit tightly on your face, checking air leakage.

Source : Correct Methods of Wearing Hygiene Masks by the Ministry of Food and Drug Safety