

# Flattening the COVID-19 Curve

: How Korea responded to a pandemic with ICT



Ministry of Economy  
and Finance



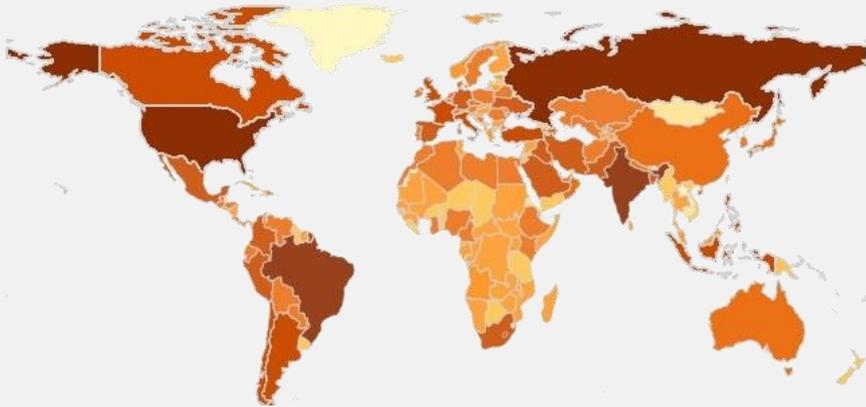
## Table of Contents

1. Current development of COVID-19 in Korea & beyond
2. How Korea responded to a pandemic with ICT
3. Recommendations for other countries
4. Closing

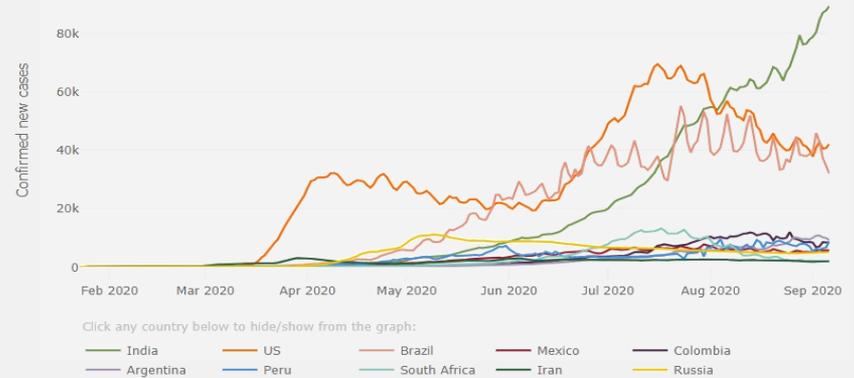
# Current Developments of COVID-19 in Korea and Beyond

## COVID-19 spreading from Asia to Europe/US and then EMs

Total number of confirmed cases by region

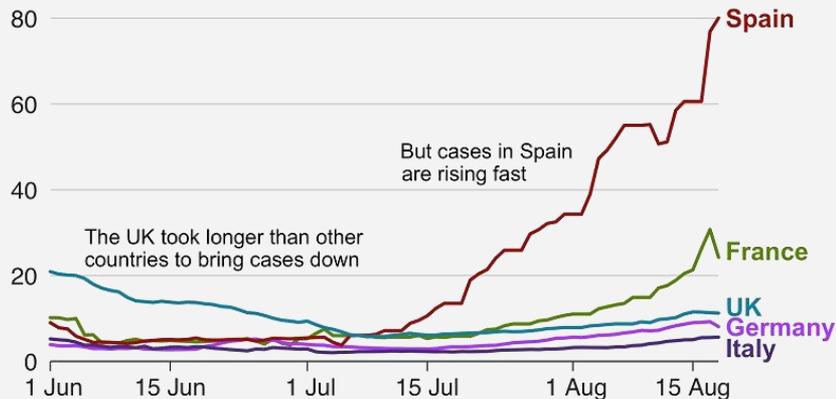


Daily confirmed new cases in the ten most affected countries

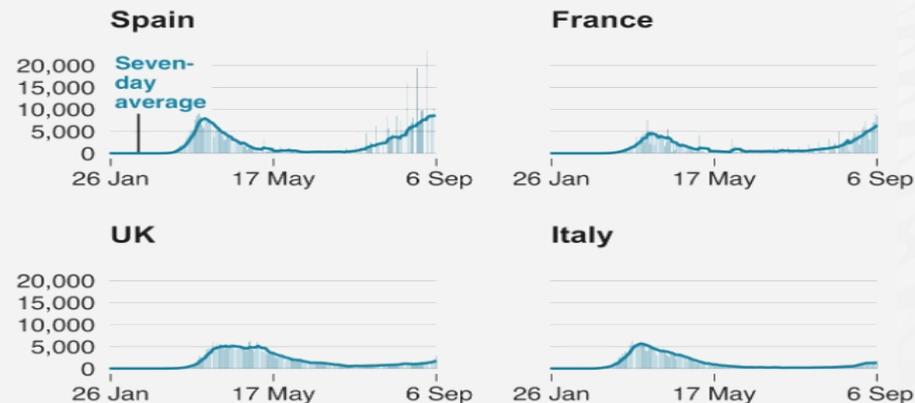


## Resurgence of COVID-19 cases

Europe : Total cases per 100,000 People in recent weeks



Number of new confirmed cases in European countries



# Current Developments of COVID-19 in Korea and Beyond

Korea has also experienced second wave recently, but numbers are beginning to drop slowly

Daily number of new cases in Korea

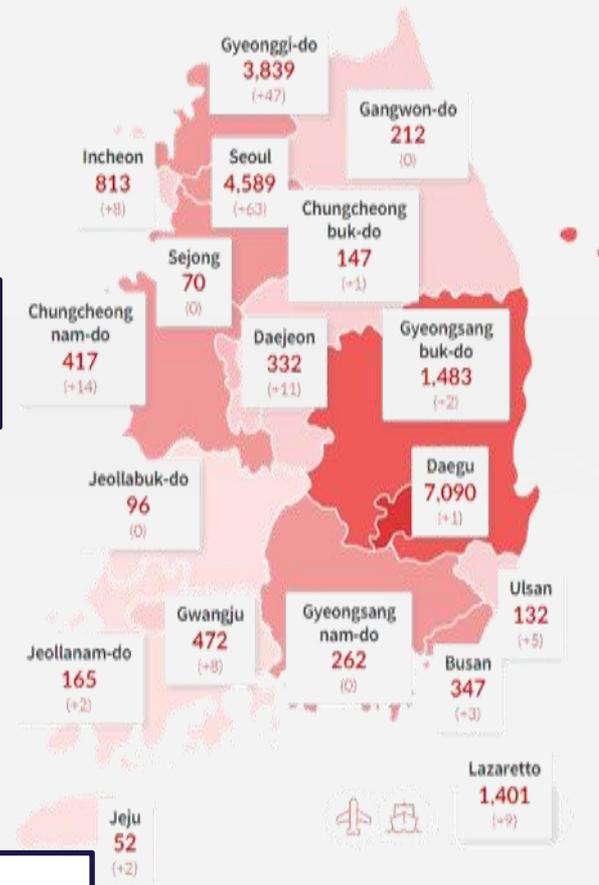
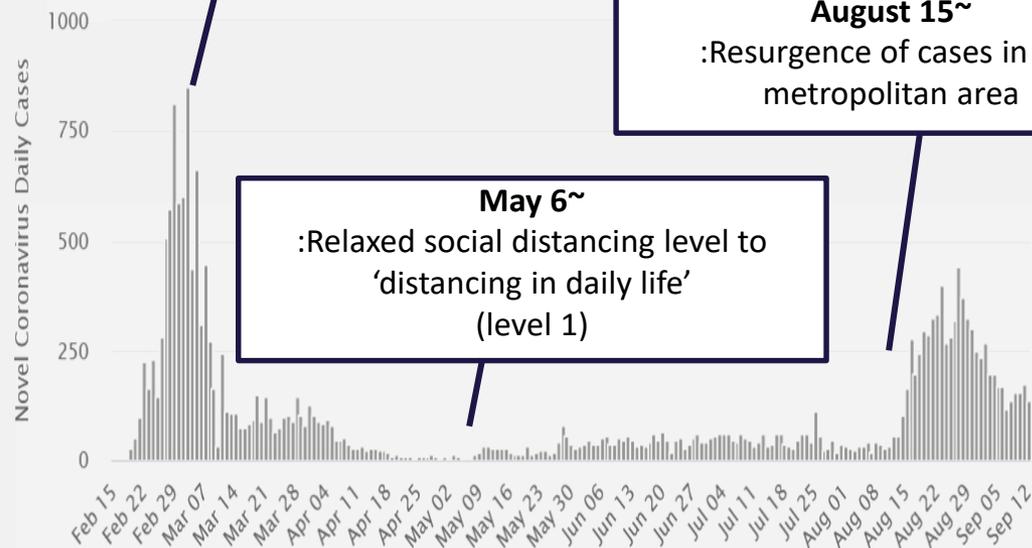
Total number of confirmed cases by region

**February 18~**  
:Cluster of Infection detected in Daegu and Gyeongsangbuk-do with the specific religious sect as the main epidemiological link

**August 15~**  
:Resurgence of cases in the metropolitan area

**May 6~**  
:Relaxed social distancing level to 'distancing in daily life' (level 1)

**August 23~**  
:Raised social distancing level to level 2



# Main Features of Korea's Response : 4T+1P



## Testing

- ✓ **Fast-track approval for kits**  
Maximum daily testing capacity to 15,000
- ✓ **A variety of methods**  
Drive-thru, Walk-thru, Screening stations, etc.
- ✓ **Self Health Check App**  
Mandatory for inbound travelers



## Tracing

- ✓ **Quick identification of the transmission route**  
Epidemiological Investigation Support System
- ✓ **Self-quarantine Safety Protection App**  
Self-diagnosis, Alarming when out of the quarantine area



## Treating

- ✓ **System based on severity**  
Accommodating classified patients at the corresponding facilities
- ✓ **Securing beds for hospitalized treatment**  
Regional hub hospitals, national infectious disease hospitals, etc.
- ✓ **Separating respiratory and non-respiratory patients**

## Transparency

- Necessary Information timely announced through briefings twice a day
- The COVID-19 official website released
- Providing dataset (ex. public mask sales) to be used by the general public



## Participation

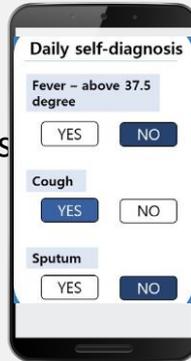
- Competent medical personnel
- Practicing personal hygiene measures
- Mature sense of civil awareness



# How Korea Responded to a Pandemic with ICT – Tracing & Isolating Using Apps

## Self-check mobile application

- The Korean government has developed a mobile diagnosis application to monitor any possible COVID-19 symptoms of inbound passengers and provide them with prompt medical advice
- All inbound passengers must report their health conditions once a day during 14 day



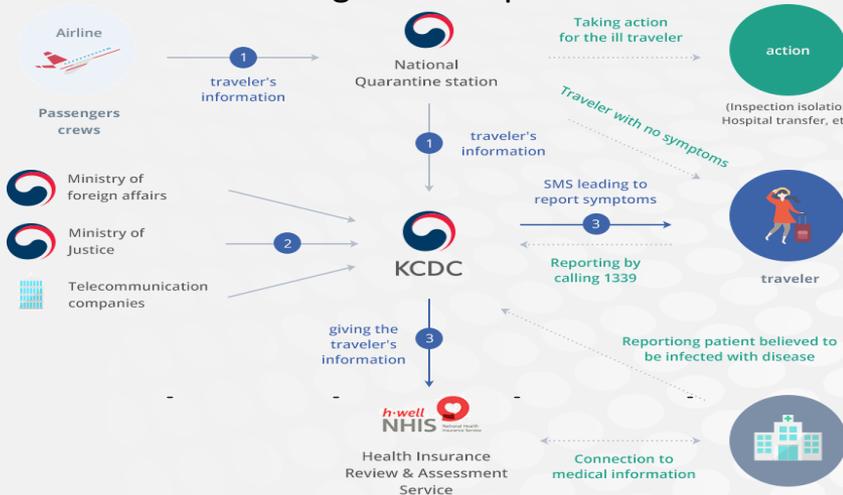
## Self-quarantine safety mobile applications

- Effective monitoring of those under self-quarantine
- (1) Submit a self-diagnosis to their government officers
- (2) A GPS-based location tracking to prevent possible violations of self-quarantine orders
- (3) Provide self-quarantine guidelines



## Smart Quarantine Information System

- Utilizes overseas roaming data to identify inbound passengers from high-risk regions and to monitor them during the latent period of the infection



## Epidemiological Investigation Support System

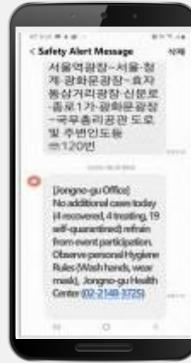
- (1) Collects various types of real-time data
- (2) Cross-checks the epidemiological interview responses of the patients
- (3) Detects cluster infection and identifies source of transmission



# How Korea Responded to a Pandemic with ICT – Information Sharing

## Timely delivery of public information

- Using the Cellular Broadcasting Service, the Korean government can transmit emergency alert text messages on the COVID-19 outbreak



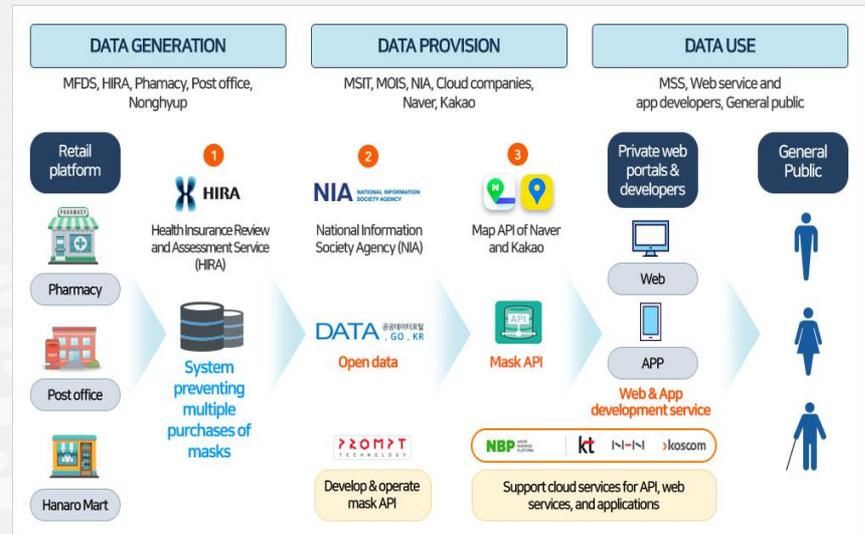
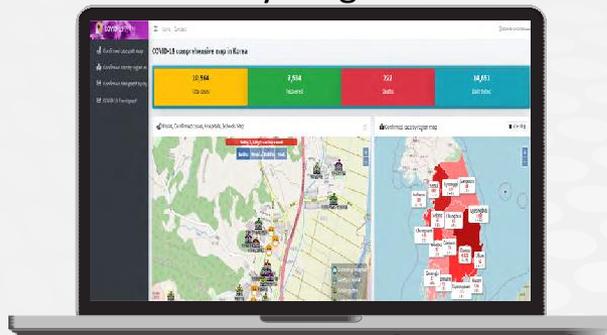
## Mobile application for mask supply

- Consumers can check the real-time inventory of face masks
- Information on mask sellers is automatically updated in accordance with data publicly released by the National Information Society Agency



## Comprehensive situation map

- Using the Geographic Information System, a comprehensive situation map marking patient routes was developed.
- Utilized data released by the government



# How Korea Responded to a Pandemic with ICT – Social Distancing

## Smart working

- The government launched a web-site to provide the private companies' software solutions of remote working to private and public organizations.



## Remote education in schools

- The government supports stable access to the online education system and a learning-friendly environment.



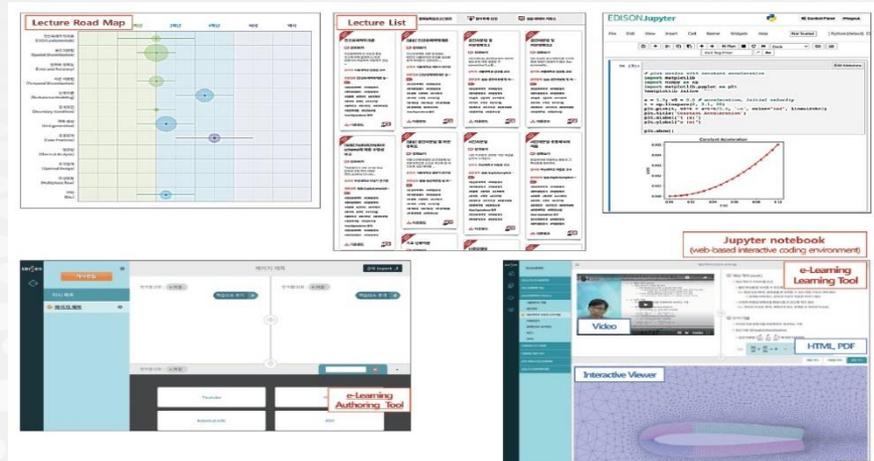
## Development of cybersecurity guidelines

- The government developed cyber security guidelines to ensure that information security protocols are complied with during teleworking.

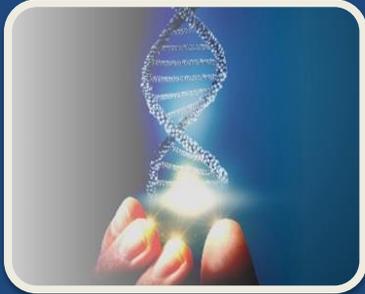


## Hands-on training via online platforms

- EDISON platform and EDISON MOOC, developed with the support of the government, promotes the efficiency of online education.



## Recommendations for Other Countries



Governments need to take the lead in R&D.

- In Korea, the rapid development of test kits was made possible due to government R&D investment over the years.



Governments have to leverage digital technologies for public communication channels and network.

- After the MERS outbreak in 2015, the Korean government realized the importance of prompt public communication.



Governments have to facilitate public-private partnerships as well as strong stake holder networks to advance digital technologies and their applications.

- The Korean government disclosed the sales data for publicly distributed face masks, and developers and businesses provided app services.



## **MOEF has released 4 reports on Korea's COVID-19 response strategy.**

- ① Tackling COVID-19
- ② Flattening the curve on COVID-19
- ③ Testing time for Resilience
- ④ Safeguarding Economic Resilience

Please find the reports in the link below

<http://english.moef.go.kr/pc/selectTbPressCenterDtl.do?boardCd=N0001&seq=4917>