Coronavirus Disease 2019 Response Guidelines (For Local Governments)

Edition 7-3

3 / 15 / 2020

The Central Disease Control Headquarters

The Central Disaster Management Headquarters

The Korea Centers for Disease Control and Prevention

Legal basis:

The coronavirus disease 2019 (COVID-19), which was first reported from Wuhan, Hubei, China, corresponds to 「Infectious Disease Control and Prevention Act of Republic of Korea」 Article 2, Subparagraph 2, Item "Class 1 infectious disease — novel infectious syndrome" until further clinical and epidemiological details are revealed, and will be acted upon accordingly

• Direction of response:

- The guidelines are written based on current knowledge of COVID-19
- Case definition, incubation period, procedures, etc. are to be updated based on future occurrences and results of epidemiological investigation
- Matters regarding clinical diagnosis will follow relevant academic guidelines with exception for administrative matters described in this guideline
- Major revisions: Changes in standards for quarantine release of close contacts and confirmed cases
 - [Appendix 13] Frequently Asked Questions

Comparison of New and Previous Quarantine Releases

Category	Previous Release (Edition 7-2)	New Release (Edition 7-3)
Confirmed Cases	[Standards for Release From Quarantine for Confirmed Cases With Symptoms] O Quarantine release standards should satisfy the following clinical and laboratory criteria in principle 1. Clinical criteria: Clinical symptoms are alleviated with no fever without any consumption of antipyretics 2. Laboratory criteria: Two negative PCR test results conducted at 24-hour intervals O If the clinical criteria are met, the patient can be discharged from hospital even if the laboratory criteria are not satisfied. In this case, the standard for release from quarantine is as below: 1. Laboratory criteria: Two negative PCR test results conducted at 24-hour intervals (in principle) OR 2. Release from quarantine after 3 weeks of self- or non-hospital quarantine since the symptom onset date * However, the high-risk group must meet the clinical and laboratory criteria	[Standards for Release From Quarantine for Confirmed Cases With Symptoms] ○ Quarantine release standards should satisfy the following clinical and laboratory criteria 1. Clinical criteria: Clinical symptoms are alleviated with no fever without any consumption of antipyretics 2. Laboratory criteria: Two negative PCR test results conducted at 24-hour intervals ○ If the clinical criteria are met, self- or non-hospital quarantine is possible even if the laboratory criteria are not met. However, quarantine release is only granted when the laboratory criteria are satisfied. 1. Laboratory criteria: Two negative PCR test results conducted at 24-hour intervals REMOVED
	Standards for Release From Quarantine for Confirmed Cases Without Symptoms Ouarantine release standards should satisfy the following laboratory criteria in principle 1. On the 7th day from the date of confirmation, patients may be released from quarantine following two negative PCR test results conducted at 24-hour intervals 2. If the PCR test result remains positive on the 7th day from the date of confirmation, patients may be released from quarantine after additional seven days (14 days since the date of confirmation) following two negative PCR test results conducted at 24-hour intervals OR	[Standards for Release From Quarantine for Confirmed Cases Without Symptoms] ○ Quarantine release standards should satisfy the following laboratory criteria 1. On the 7th day from the date of confirmation, patients may be released from quarantine following two negative PCR test results conducted at 24-hour intervals 2. If the PCR test result remains positive on the 7th day from the date of confirmation, patients may be released from quarantine following two negative PCR results conducted at 24-hours intervals after a set examination period (e.g., the 10th day, the 14th day, etc.) as determined by medical staff

	If patients remain asymptomatic, they may be released from quarantine following three weeks of self- or non-hospital quarantine	
Suspected Cases	Quarantine for 14 days from the last day of contact with a confirmed case.	Maintain current standard (same as left).
Close Contacts	Quarantine for 14 days from the last day of contact with a confirmed case. However, among the close contacts of confirmed cases, healthcare personnels (including caregivers) should get tested on the 13th day of quarantine even if they are asymptomatic. If the test result is negative, then the individual is released from quarantine after the 14th day.	Quarantine for 14 days since the last contact with the patients. However, among the close contacts of confirmed cases, healthcare personnels (including caregivers) and family members living with them should get tested on the 13th day from the last day of contact even if they are asymptomatic. If the test result is negative, then the individual is released from quarantine after the 14th day.
Families Living With Confirmed Cases	Confirmed patients' families quarantined in hospital / facility: Release from quarantine 14 days after the last day of contact. Confirmed patients' families in self-quarantine: Release from quarantine 14 days after the confirmed case is released from quarantine.	Maintain current standard (same as left).

< Table of Contents >

I . Background		9
1. Definition		9
2. Outbreak Status		9
3. Coronavirus Disease	2019 (COVID-19) Related Information	C
II . Response		11
1. Response Protocols	1	1
2. Implementation Syste	m ("Red Alert")	8
Ⅲ . Case definitions and Mar	agement Methods 1	8
1. Case Definitions	1	
2. Close Contact Definiti	ons1	9
3. Management (Surveil	ance) Methods 2	20
IV . Responding to Suspected	d Cases and Patients Under Investigation (PUI) 2	22
1. Suspected Cases	2	25
2. Patient Under Investig	ation (PUI) 2	28
3. Process for Managing	Examinees in COVID-19 Screening Centers (Health Centers) 3	
V . Response Guidelines for		
1. Reporting Confirmed		
2. Isolation of Confirmed		
3. Epidemiological Inves		
4. Release from Quaran	ine 4	ŀ5
5. Prevention and Control		
VI . Bed Assignment and Tra	nsfers 4	١9
1. Establishing a Bed As	signment and Management System 4	.9
2. Bed Allocation and M	-	
3. Patient Transportation	5	50
4 Patient Transfer	5	<u>ن</u>

VII	. Management of Deceased	Persons	 	 52
	1. Purpose		 	 52
	2. Principles		 	 52
	3. Scope and Responsibili	ties	 	 52
	4. Step-by-Step Measures		 	 53
	5. Administrative Matters		 	 54
VIII	. Laboratory Testing Manag	ement	 	 57
	1. Specimen Collection	•	 	 57
	2. Testing Request		 	 60
	3. Specimen Transport	-	 	 60
	4. Conducting Tests		 	 61
	5. Reporting Test Results		 	 62
IX	. Environmental Manageme	nt	 	 63
	1. General Principles of D	sinfection	 	 63
	2. Preparations Before Dis	infection	 	 63
	3. Precautions During Disi	nfection	 	 64
	4. Precautions After Disinf	ection	 	 65
	5. Disinfection Measures		 	 66

<Forms>

1. Infectious Disease Reporting Form 68
2. Infectious Disease Mortality Report (Post-mortem inspection)
3. Inpatient Treatment Notice 75
4. Notice of Isolation/Quarantine (Korean/English)77
5. COVID-19 Basic Epidemiological Investigation (Confirmed Cases)
6. COVID-19 Case Management Report (Confirmed Cases)
7. Self-Isolated/Quarantined Cases Monitoring Log83
8. Patient Health Monitoring Log84
9. COVID-19 Close Contact Surveillance Form85
10. Daily Status Report of Epidemiological Investigation by Municipal COVID-19 Immediate Response Task Force (Example) 86
11. Epidemic Control Measure Form 88
12. Certificate of Disinfection 89
13. Specimen Laboratory Test Request Form 90

Central Disease Control Headquarters (CDCH) Departments

Department		Task
Crisis communication / Administrative	Crisis communication team	 Press conference (briefing, telephone briefing, etc.) National communication (content development and distribution, communication channel operation, etc.) and statistics calculation 1339 management team
support group	Administrative support team	CDCH administrative support (personnel, material support, etc.)
Situation room		 Emergency Control Room (EOC) operation Report, reception, response management, statistics calculation Daily report and dissemination of the situation Instant response team
	General team / Guidelines management team	 General management of CDCH Domestic patient outbreak monitoring and outbreak report, statistics calculation Prepare public information materials such as press releases Establish diagnostics and reporting standards Provide guidelines
Situation general	Situation analysis / International cooperation team	 Monitoring of information on domestic and international COVID-19 Statistics calculation, information and risk analysis, analysis results sharing Operation of international cooperation channels with foreign governments and international organizations
	Quarantine management team	 Overview of quarantine measures Calculation of statistics and dissemination of the status of National Quarantine Station Immediate fever monitoring and health condition questionnaire Promotion for overseas travelers
Healthcare institution /	Healthcare institution / Infection control team	 Support for infection control in healthcare institutions Infection Control Guide for COVID-19 Screening Center
Resource management team	Healthcare Resource management team	 National emergency medical resource management, statistics calculation (Nationally designated inpatient beds, national stockpiles, human resources)
Patient / Contact management	Epidemiological investigation team	 Instruction and education of epidemiological investigations of cities, provinces, as well as cities, counties, and districts Analysis of epidemiological characteristics through identification of transmission sources and paths Operation and management of patient / contact management system, statistics calculation

	Patient management team	 Planning for patient management, high-risk groups management Identify and investigate the status of the dead and quarantine releases
	Information analysis team	 Master DB construction and data management, statistical analysis, etc.
Diagnostic analysis	Diagnostic test management general team	 Laboratory test standardization management Laboratory accuracy evaluation management Expansion and management of laboratory inspections of other organizations Specimen transfer
management	Inspection analysis team	 Inspection to identify pathogens Virus isolation culture and genome analysis Distribution of inspection method and accuracy evaluation Inspection method improvement and development

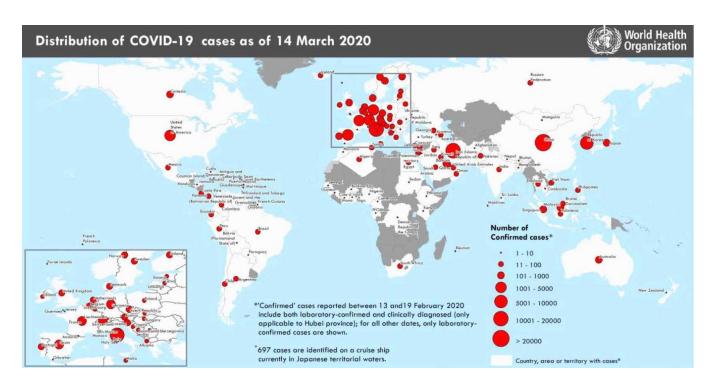
I. Background

1. Definition

- On 02/11/2020, WHO named the new coronavirus disease, first identified in Wuhan, China,
 COVID-19
 - * COVID-19 stands for "CO"rona "VI"rus "D"isease-2019
- o On 02/12/2020, the Korean government decided to call the coronavirus: Corona 19

2. Outbreak Status

- From 12/31/2019 to 01/03/2020, a total of 44 patients with pneumonia of unknown etiology in China were reported
- o On 01/07/2020, a new type of coronavirus was isolated by the Chinese Ministry of Health
- On 01/11-12/2020, the Chinese Ministry of Health reported the cases' exposure history to the Huanan Seafood Wholesale Market in Wuhan
- Since 01/13/2020, other countries* identified confirmed cases related to traveling overseas
 * Thailand (0/13), Japan (01/15), Korea (01/20)
- As of 03/14/2020, 142,539 cases have been confirmed and 5,393 deaths occurred in a total of 136 countries



3. Coronavirus Infection -19 (COVID-19) Related Information

* To be updated as the characteristics of the virus are revealed.

Definition	Severe acute respiratory syndrome due to the infection of coronavirus 2 (SARS-CoV-2)			
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Disease classification	 Nationally notifiable disease: Class 1 infectious disease — novel infectious syndrome Disease code: U07.1 			
Pathogen	SARS-CoV-2: An RNA virus belonging to the <i>Coronaviridae</i> family			
Transmission routes	 As of now, it is thought to spread from person to person through droplets and contacts with patients. Through droplets when a person with the virus coughs or sneezes By touching objects contaminated with the virus, then touching one's eyes, nose or mouth. 			
Incubation period	For 1~14 days (4~7 days on average)			
Diagnosis	Patient: A person who has been confirmed to be infected with the pathogen according to the laboratory criteria for the diagnosis.			
Diagnosis criteria	 Laboratory criteria for the diagnosis The virus is isolated from the sample Specific genes are detected in the sample 			
Symptoms	 Various symptoms of respiratory infections, ranging from mild to severe, such as fever, malaise, cough, shortness of breath and pneumonia In addition, phlegm, sore throat, headache, hemoptysis, nausea, and diarrhea also appear 			
Treatment	 Symptomatic Treatment: Conservative treatments such as IV therapy and antipyretic treatment. No specific antiviral drug is currently available 			
Case fatality rate	 The case fatality rate is known to be 1-2%, but it is not yet confirmed. However, the elderly, immunocompromised patients, and patients with underlying medical comorbidities are most likely to be in critical condition or die from the virus. 			
Management	<patient management=""> Compliance with standard regulations and avoidance of droplets and direct contact While having symptoms, patients are advised to stay at home and avoid contact with others. </patient>			
	<pre><persons contact="" management="" of=""></persons></pre>			
Prevention	 No vaccine exists Correct handwashing Wash hands with soap for 30 seconds or more in running water Wash hands after returning home, after bowel movement, before and after meals, before and after diaper change, after blowing nose, coughing, sneezing, etc. Cough etiquette When coughing, cover mouth and nose with tissue or sleeves Wear a mask when having any respiratory symptoms Avoid touching eyes, nose and mouth with unwashed hands 			

II. Response

1. Response Protocols

A. Legal basis

We will respond to the **coronavirus disease** (COVID-19), which was first reported in the Hubei Province of China, as a "**Class 1 infectious disease** — **novel infectious syndrome**" until clinical and epidemiological information becomes available.

> [Appendix 1] Main contents of legal basis for response to COVID-19

B. Direction of response

- Early detection and identification of outbreak patterns
- o Rapid epidemiological investigation, management of patients and their contacts
- Reinforced promotion of education for prevention of COVID-19

C. Management policy

- Prevent spread of infection through the approach of "Monitoring Epidemiological investigation - Management"
- Prevent infection through education and promotion of personal hygiene such as proper hand washing and cough etiquette
- Strengthen community capacity by establishing a cooperative system of local governments, private medical institutions, and related organizations

Summary of management policy

Monitoring	Epidemiological investigation	Management	Education/Public awareness/Cooperation
Patients Early detection of patients Early detection of cluster cases	Identify scale of occurrence Identify infectious agents and pathogens Block spread Prevent additional	Patients Implement treatment and quarantine measures Close Contacts	Build capacity of local government Build system of cooperation between affiliated organizations
2. Pathogen Isolation and identification of virus Confirmation of suspected viruses Genetic analysis, etc.	outbreaks	Check for disease onset Quarantine / monitoring if necessary Environment Carry out disinfection and	· Educate and raise public awareness among the community
		prevention measures	

2. Implementation System ("Red Alert")

A. Establish organizations

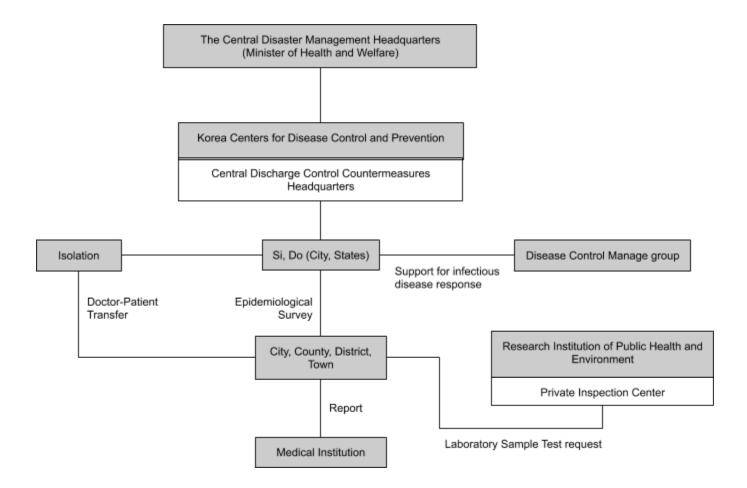
- Continue operation of the Central Disease Control Headquarters at the Korea Centers for Disease Control and Prevention.
- Establish and operate the Central Disaster Management Headquarters of the Ministry of Health and Welfare.
- Continue operation of regional Disease Control Task Forces at the city, province, district, and borough level, and establish regional Disaster and Safety Countermeasures Headquarters in affected areas.

Crisis warning level	Response system			
	Central		Local	
4	Central Disease Control	Central Disaster Management Headquarters (Minister of Public Administration and Security or Prime Minister)		Regional Disaster Safety Policy Headquarters (All local governments)
Critical	Headquarters (Disease Management Headquarters)	Central Disaster Management Headquarters (Ministry of Health and Welfare)	Pan-government Support Headquarters (Ministry of Public Administration and Security)	Local Quarantine Countermeasures (All local governments)

B. Working council

 Establish the Central-Local Working Council under the Deputy Head of the Central Disaster Management Headquarters (Vice Minister) to coordinate activity adjustments of central and local governments.

C. Roles of central vs. local governments



D. Responsibilities of each organization

Related organizations	Roles
Korea Centers for Disease Control (Central Disease Control Headquarters)	 Continue operation of the Central Disease Control Headquarters In case of large-scale clusters, support on-site actions (e.g. epidemiological investigations and quarantine) Enhance crisis monitoring and evaluation Strengthen the operation of 24/7 emergency situation room Prevent additional imported cases through strengthening entry screening Strengthen an early patient surveillance system Manage laboratory inspections (institution expansion, quality management, etc.) Coordinate cooperation among related organizations Press communications (briefing, press releases, coverage support), civil complaint response and national communication management
Municipality / City / County / District	 Operate regional prevention centers for all municipalities, cities, counties, and districts nationwide Operate regional disaster safety measures counters for all municipalities, cities, counties, and districts where COVID-19 occured Cooperate with the central-local government working councils Operate patient management teams in all cities and provinces nationwide (severity classification team, bed allocation team)* Regional patient monitoring system Operate regional epidemic control infrastructure Regional epidemiological investigation, on-site epidemic control measures, patient transfers, close contact identifications support, patient and close contact management, release of quarantine, etc. Strengthen the cooperation system with relevant local organizations Strengthen communications such as education and promotion for local residents Manage isolation beds and facilities in the area and plan for additional securing Reorganize public health centers focused on epidemic control services and reinforcement of inspection personnel
Research Institute of Public Health and Environment	COVID-19 pathogen laboratory test at the municipal level
Infectious Disease Management Support Group	 Technical support (COVID-19 monitoring, epidemiological investigation, data analysis, etc.) at the municipal level Technical support for management strategies for COVID-19 customized for each municipality

Healthcare institution	 Diagnosis and treatment of COVID-19 patients Report COVID-19 cases, deaths, and discharges In case of COVID-19 occurrence, cooperate in epidemiological investigations and infectious disease management Operate COVID-19 screening center
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^{*}Patient Management Task Force: Refer to VI. Bed Assignment and Transfers

E. Municipal COVID-19 Immediate Response Task Force

- Establish and operate an Municipal COVID-19 Immediate Response Task Force within Municipal COVID-19 Regional Epidemic Control Task Force
 - For every municipality and city/county/district with confirmed cases, dispatch the Immediate Response Task Force with the authority to perform epidemiological investigation and manage countermeasures for close contacts and local environment.
 - * Concurrently, the KCDC shall form a parallel response team for each region (consists of one epidemic control officer and one to two epidemiology investigators) to advise epidemiological investigation and patient management.
 - In the event additional cases emerge in congregate settings or in association with multiple contacts, provide support (epidemic control, medical care, lifestyle) and guidance on control measures and operational plans.
 - (Organization) Establish an Immediate Response Task Force consisting of 5 to 7
 personnels or more covering the following positions/tasks:

Epidemic control officer*	Epidemiological investigator(s)	Field management/Security	Contact tracing database manager	Administrator	Testing management	
1	1-2	1	1	1	1	

^{*} The epidemic control officer must either be the current Director General or Director of Public Health Department or must be appointed by the mayor/governor of respective municipality (Infectious Disease Control and Prevention Act, Article 60)

- (Operation) Operate flexibly according to each municipality's circumstances*
 * e.g. number of personnel, order of deployment, and mode of operation (planning must include backup personnel)
- (Task) To perform appropriate investigation and response e.g.: assess situations, implement emergency measures, control site access, epidemiological investigation, etc.

Qualifications and duties of the epidemic control officer

- Article 60, Infectious Disease Control and Prevention Act of Republic of Korea (Epidemic Control Officer)
 - 1. An epidemic control officer is a public official who oversees tasks related to prevention of infectious diseases and control of epidemics; the officer is to be appointed by the Minister of Health and Welfare and mayor/governor of the respective municipality. To prevent and control

infectious disease outbreaks, however, an epidemic control officer may be appointed by a mayor/commissioner/borough chief of a city/county/district among their government officials.

- Article 25, Enforcement Decree of The Infectious Disease Control and Prevention Act of Republic of Korea (Qualifications and Duties of the Epidemic Control Officer)
 - 1. As required by Article 60, Paragraph 1, the appointee must be a level 4 or above government official with strong experience in fields related to infectious disease management.
 - * For an officer for a city/county/district, the appointee must be a level 5 or above government official with strong experience in fields related to infectious disease management.
 - 2. In addition to those outlined in Article 60, Paragraph 3, an epidemic control officer is authorized to perform the following:
 - i. Measures to hospitalize or quarantine anyone suspected to be infected by the infectious agent at a proper venue for a certain period of time
 - ii. Measures as needed to disinfect contaminated sites or buildings; and any other necessary measures
 - iii. Measures to prohibit laundry or mandate wastewater treatment in specified areas

Step	Main task
Advance preparation	Establish Municipal COVID-19 Immediate Response Task Force
	 Determine the scale, history, and movement after the symptom onset through information from confirmed cases and their close contacts Immediate quarantine measures for close contacts; report and test for those showing symptoms Acquire data such as human resources, users, and environment of facilities in congregate settings, and announcement of epidemiological investigation and response plan
Field response	 Set action items, epidemiological investigation plans, priorities, etc. through initial situation evaluation Divide tasks Epidemiological investigation: identify patient's movement and transmission paths, and manage facilities and environment On-site control Facility management (temporary restriction on operation until proper disinfection) Close contact investigation and management Waste management
Corrective measures	 Manage confirmed cases (quarantine release if criteria are met) Home isolation and active monitoring of symptoms of close contacts; When extensive exposure is confirmed in a community setting (if necessary) shut down the facility, isolate close contacts, etc.
Situation report	 Daily epidemiological investigation updates to municipal COVID-19 Immediate Response Task Force (Once a day) In case of death, report immediately

F. Municipal COVID-19 Patient Management Task Force

- o Patient Management Task Force: Municipality to establish two teams under the task force:
 - Severity Classification Task Force: Consists of doctors and operating personnels
 - Hospital Bed Allocation Task Force: Consists of administrative and health care personnels

III. Case Definitions and Management Methods

The case definitions below apply to the imported COVID-19 spread under the **crisis alert level "Red Alert,"** and may change depending on the occurrence of domestic confirmed cases, results of epidemiological studies, and the prevalence of spread.

1. Case Definitions

Confirmed case

A person whose infection with a pathogen has been confirmed in accordance with diagnostic criteria, regardless of clinical condition.

❖ Diagnostic test : COVID-19 gene (PCR) test, virus isolation

Suspected case

A person who, after contact with a confirmed case during the confirmed case's symptomatic period, within 14 days of the contact, develops a fever (37.5°C or higher) or respiratory symptoms (e.g., coughing, shortness of breath, etc.).

Patient Under Investigation (PUI)

- A person who, according to a doctor's diagnosis, is suspected of COVID-19 or of pneumonia of an unknown etiology
- A person who develops fever (37.5°C or higher) or respiratory symptoms (e.g., coughing, shortness of breath, etc.) within 14 days of visiting a country with regional spread* of COVID-19 like China (including Hong Kong and Macau)
 - *Refer to the country classifications on the WHO homepage (local transmission) or the KCDC homepage→COVID-19→outbreak trends→local transmission
- A person with an epidemiological connection with a domestic cluster outbreak of COVID-19, and who develops a fever (37.5°C or higher) or respiratory symptoms (e.g., coughing, shortness of breath, etc.) within 14 days

Cases subject to reporting

o (Confirmed)	Someone confirmed as infected in accordance with diagnostic criteria, regardless of clinical condition					
o (Suspected)	Someone who has had contact with a confirmed case within the last 14 days	+				
∘ (PUI*)	Someone who has visited a country with regional COVID-19 transmission (e.g., China including Hong Kong and Macau) within the last 14 days	+	Develops a fever (37.5°C or higher) or respiratory symptoms (e.g.,			
∘ (PUI*)	Someone with an epidemiological connection to a domestic cluster outbreak of COVID-19 in the last 14 days	+	coughing, shortness of breath, etc.)			
∘ (PUI*)	Someone who is suspected to have COVID-19, su unknown etiology, according to a doctor's opinio		pneumonia of an			

^{*}Patient Under Investigation

[Criteria for Diagnostic Testing Fee Subsidy]

- Healthcare facilities other than public health clinics): Only patients reported to public health clinics according to the applicable case definitions (applicability must be noted on the Remarks section) will be eligible for health insurance coverage and deductible support
- o Public health clinics: Subsidized testing fees will be given to the KCDC Designated Laboratories according to the commission contract, but only for patients reported to public health clinics according to the applicable case definitions. Local governments will provide the fees for specimens obtained according to the respective government's needs, aside from the applicable case definitions.

2. Close Contact Definitions

- A close contact is a person who has been in contact with a confirmed case
 - Close contacts are determined by City/County/District public health clinics as well as epidemiological investigations by Municipal COVID-19 Immediate Response Task Force
 - Close contacts can be additionally determined by reporting and contact monitoring, aside from the above mentioned epidemiological investigations

3. Management (Surveillance) Methods

Note: Contact management by public health departments and task forces can be done flexibly according to the local conditions (see Appendix 2: Role divisions for the self-quarantine departments and the public health departments)

A. Subject monitoring

- Monitoring: to confirm whether COVID-19 suspected symptoms occur during the maximal incubation period
- o Active Surveillance
 - Method: Actively confirming existence/nonexistence of fever or respiratory symptoms twice a day
 - Jurisdiction: The public health center in the jurisdiction of the subject's residence*
 *(if the subject moves the quarantine location, jurisdiction is transferred from the public health center at the previous location)
- Monitoring done via self-diagnosis app

B. Health education

- DO NOT: Go out, come into contact with others (including meals), use public transportation, visit multi-use facilities, etc.
- DO: Wear masks to prevent respiratory infections, emphasize hand washing, obey cough etiquette, inform any history of overseas travel/contact with a patient when visiting healthcare facilities, etc.
- o If symptoms occur or exacerbate, first contact the KCDC call center (☎1339, area code+120) or a public health center

C. Quarantine/isolation measures

- If at risk for transmitting a pathogen to others, make sure a patient resides in a space separated from others; reduce the risk of transmission by managing symptoms
- Subject to quarantine/isolation: confirmed cases, suspected cases, contacts with confirmed cases (without symptoms)
- Quarantine locations can be classified as: home quarantine, facility quarantine, hospital isolation
- Quarantine methods
 - Home quarantine: quarantine in a separated place at home
 - Facility quarantine: quarantine at an infectious diseases control facility*,
 quarantine office, healthcare facility, or temporary quarantine facility within the
 national quarantine station, designated by the Minister of Health and Welfare, a mayor,
 or a governor.

- * A healthcare facility established according to the Infectious Diseases Prevention Act (article 37, paragraph 1, subparagraph 2) to isolate confirmed cases; other facilities are referred to as "Residential Treatment Centers" below
- ◆ [Legal Basis: Infectious Diseases Prevention Act, articles 37 and 39, and its enforcement regulations (article 31, paragraph 2); isolation Act, article 16 and its enforcement regulations (article 14)]
- Hospital isolation: isolation at hospital due to the necessity of inpatient treatment;
 during triage, patients in severe conditions or in high risk groups must be hospitalized

[High risk group]

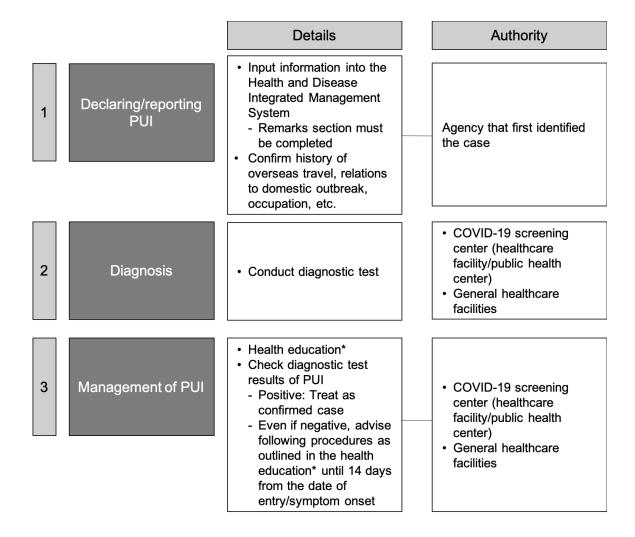
- o Age: 65 or older
- Chronic Underlying Health Conditions: Patients with diabetes; chronic renal, hepatic, pulmonary, and/or cardiovascular diseases; patients with hematologic cancers; any cancer patients undergoing chemotherapy; patients taking immunosuppressants; HIV/AIDS patients
- Special Situations: Patients with morbid obesity, pregnancy, end-stage-renal-disease undergoing dialysis, and/or organ transplant
- Inpatients: Patients with oxygen saturation below 90% on room air requiring initial oxygen therapy

IV. Responding to Suspected Cases/Patients Under Investigation (PUI)

□ Suspected case

Authority Details Suspected case · Input information into the Health and Disease reporting Integration Management System Agency that first identified · (Starting 14 days before the case symptoms arise) Check records of contact with confirmed cases Check symptoms Suspected case · Case classification 2 (determine severity) Municipal COVID-19 management • Issue inpatient treatment Immediate Response Task notice **Force** · If necessary, assign and transport to hospital bed Municipal COVID-19 Patient Sample collection and Management Task Force analysis · Input sample analysis City/county/district · Quarantine protocol results into the Health and epidemiological Disease Integration investigation team Management System Release of Confirmation of test 3 Municipal COVID-19 Patient quarantine results from suspected Management Task Force case Even if test results are Final confirmation of City/county/district negative, quarantine for test results from epidemiological 14 days after contact with suspected case and investigation team a confirmed case release of quarantine

□ Patient Under Investigation (PUI)



* Health education

o DO NOT:

- Go out (especially to multi-use facilities where many people gather)
- Be in close contact with others
- Use public transportation

o **DO**:

- Emphasize hand washing for personal hygiene and observe cough etiquette
- Keep a distance of at least 2 meters and wear a mask to prevent respiratory infections when talking to others is necessary.
- When visiting a healthcare facility is necessary, disclose pertinent personal information such as history of overseas travel, connections to domestic outbreaks, occupation, etc.
- If symptoms occur or worsen, please contact the Center for Disease Control and Prevention (☎1339, area code + 120) or a public health center.

Response procedures for suspected cases/PUI

Туре	Occurrence report	Specimen collected by	Managing authority	Management method	Specimen transfer by	Inspection agency	Patient transfer/ explanation before notice of test results	Isolation notice	Release from isolatio n	Support
Suspected Case	First recognizing agency (medical institution/ public health center)	Screening clinic (medical institution/ public health center)	Municipal epidemiolog ical agency	Self- isolation/ private hospital etc.	Screening clinic (medical institution/pu blic health center)	Self or assigned agency	Own car/ on foot/ ambulance (public health center, 911) (info: screening clinic)	1.First recognizing public health agency (verbal notice) 2. Residential health center (written notice)	Municipal epidemiol ogical agency	Testing and isolation costs, etc.
PUI	First recognizing agency (medical institution/ public health center)	Screening clinic (medical institution/ public health center)	Screening clinic (medical institution/ public health center)	Health education	Screening clinic (medical institution/ public health center)	Self or assigned agency	Refrain from public transportation			Testing costs*
		General medical institution	General medical institution		General medical institution	Self or assigned agency	Refrain from public transportation			Testing costs*

- ❖ (Explanation) Prior to notification of test results, the institution that performs the evaluation and testing will provide basic guidance regarding transportation, public health education, etc.
- * However, if a preemptive isolation is required among PUI due to pneumonia of unknown etiology or other reasons, health insurance will be applied to the hospital room fees from the isolation in addition to the testing costs.

<Laboratory test priority>

- 1. PUI among contacts of confirmed patients
- 2. PUI with epidemiologic connection to domestic clustering cases
- 3. PUI suspected of COVID-19 according to doctor's opinion
- 4. Follow-up examination of confirmed patients (to determine the quarantine release)

1. Suspected Cases

A. Declaration / Report

- 1) Recognition of symptoms by suspected cases
 - (Situation 1) Voluntary notification while at the patient's home (1339 or public health center) or during self-quarantine
 - (Situation 2) Report by a medical institution (outpatient, emergency room, hospital ward, screening facilities (including public health centers), etc.)

2) Report the suspected case

- (Healthcare facility / Public health center)
 - Confirm that the patient meets the case definition criteria (history of contact with confirmed patients, clinical symptoms, relations to domestic clustering cases, etc.)
 *[Form 1] Infectious Disease Reporting Form
- (Public Health Center that first identified the case)
 - Immediately upon recognition of the reported case, verify that it was reported through the Health and Disease Integrated Management System's Infectious disease web reports
 - If unreported, notify the individual to report to a medical institution.



 Even if the web form's "patient classification" box has been checked, ensure that the "Remarks" section is filled out, indicating a "suspected case."

[Suspected case classification]

Suspected case: symptomatic individuals among those who have come into contact with a confirmed patient

B. Triage of the suspected patient

- ❖ Determine hospital-isolation or self-isolation depending on whether the patient belongs to high-risk groups and/or severity of symptoms. (by Municipal COVID-19 epidemiologic investigator and Patient Management Task Force)
- 1) Public health center that first identifies the case

Transfer of suspected patients: by a personal vehicle, walking, or an ambulance (public health center, 119), if necessary, to transfer between medical institutions for a sample collection or to move to a quarantine location

- * If the health center or 119 cannot provide the patient with an ambulance (suspected patient must wear a mask)
- 1) Drive a personal vehicle
- ② If within a walkable distance, walk while wearing a mask (minimize contact with others)
- ③ If provided with an official car (a passenger car), the driver should wear a KF94 equivalent mask and disposable gloves.

2) Self-isolation notification

- Public health center that first identifies the case: Self-isolation and testing guidance,
 verbal notification, and notification of Residential Jurisdiction Public Health Center
- Residential Jurisdiction Public Health Center: Provide instructions on the first visit and guidelines, as well as **hospitalization notice** (hospital, home, or facility) and day-to-day guideline
 - Suspected patient must self-isolate by principle*
 - * In the case of a mildly symptomatic patient who cannot self-isolate at home (requiring independent space or additional assistance), proper self-isolation location is to be provided (such as facilities or hospitals); patients with symptoms of moderate or higher severity according to patient classification must be isolated in a hospital
 - Municipal COVID-19 epidemiology investigator: Confirm action items, such as self-isolation before notification of test results and transfer to a designated hospital.
 - * If it is determined that self-isolation is not possible, inform the Municipal COVID-19 Patient Management Task Force.
 - > [Form 3] Inpatient Treatment Notice
 - ➤ [Appendix 3, 4] Refer to the Rules and Recommendations for Patients in Self-Isolation and Their Families / Cohabitants

3) Guide to hospital-isolation

Municipal COVID-19 Patient Management Task Force: Severity Classification Task
 Force assesses the severity of the case according to the severity score and risk factors,
 and Hospital Bed Allocation Task Force identifies the hospital bed availability among

designated hospitals for infectious diseases and/or secondary or tertiary hospitals within the jurisdiction that meet the severity classification.

- Priority is given to patients in need of hospitalization and immediate bed allocation.
- Notify the public health center of the hospital bed allocation result.
- Public Health Center: Upon confirmation of hospital bed assignment
 - Transfer to the assigned medical institution by transportation such as an ambulance
 - Inpatient guidance (treatment indication, process, healthcare facility for isolation, etc.)
 and inpatient treatment notice

> [Form 3] Notice of Inpatient Treatment

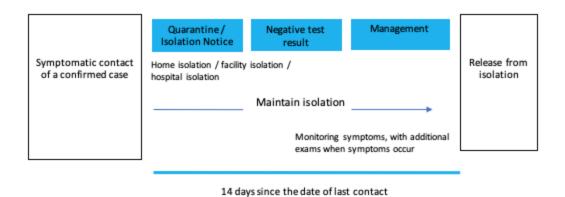
* The inpatient treatment cost is provided by the public health center in the jurisdiction of residence (The cost support will be announced in a separate letter according to the COVID-19 inpatient treatment cost support plan procedure)

C. Discharge and isolation release of suspected cases

- Criteria for isolation release
- (Suspected case) Even if the test result is negative, isolation is maintained for 14 days from the last contact with a confirmed case

That is, even if they are discharged, they must maintain 14 days of isolation from the last contact with a confirmed case

* (Ex) if the last contact date was Apr 1, isolation is released on Apr 16, the day after 14 days have elapsed.



< Management and release from isolation of a suspected case >

1) Discharge and management post-isolation

- Residential Jurisdiction Public Health Center is in charge of management, such as checking the suspected patient's status and discharge schedule
- Healthcare facility must notify the local public health center in the jurisdiction of the patient's residence when the patient is discharged
- Procedures for discharge and isolation release
 - i) If isolation is released: Return to home by any possible means of transportation

- ii) If one needs to maintain isolation after discharge: Use a personal car, walk, or take an ambulance (from fire department or public health center) to return home or a facility (while wearing a medical grade mask)
- Public Health Center: Re-issuance of inpatient treatment notice (home or facility) following isolation location change, and carry out active monitoring (isolation notice, notice distribution and education)

2) Release from isolation

- The public health center checks the patient's condition
- (Hospital/Facility Isolation) Notify the public health center in the jurisdiction of the patient's residence upon releasing the patient from isolation
- (Home Isolation) The public health center should inform the patient of his/her release from isolation
 - Advise patients to immediately inform the public health center if symptoms worsen
 - Use [Appendix 6 COVID-19 Precautions] to provide health education to the patients and their family members about precautions relevant to COVID-19.
- (Public Health Center) Report isolation release to the municipal COVID-19 epidemiological investigator and enter the isolation release information into the Health and Disease Integrated Management System
 - ➤ [Appendix 6] COVID-19 Code of Conduct

2. Patient Under Investigation (PUI)

A. Notification / Report

1) Recognition

- o (Situation 1) Confirmation at a port of entry upon screening
 - In case of an unrecognized mild fever without respiratory symptoms at the entry screening, determine whether to further investigate for COVID-19 based on the individual's body temperature, epidemiological relevance, and length of stay in Korea.
 - At the entry screening, issue the notice of quarantine for asymptomatic incomers from Hubei Province, China. Upon notification of the list, the public health center in the jurisdiction of the individual's residence/accommodation will conduct active surveillance for 14 days from the date of entry
 - If an entry screening the patient under investigation requires temporary isolated observations (target for testing), request assignment of an isolation bed from the municipal government in case of exacerbation of symptoms or a confirmed case scenario
 - ♦ See Coronavirus Disease 2019 (COVID-19) Entry Screening Response Guidelines
- (Situation 2) Voluntary notification from the patient's home (call 1339 or public health center) or confirmation during home isolation

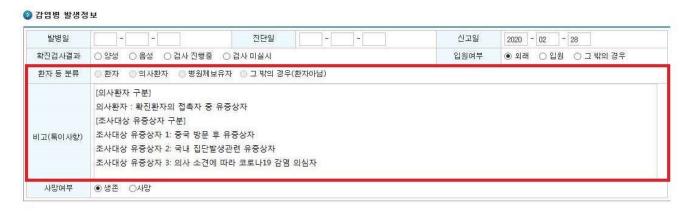
 (Situation 3) Declaration by healthcare institutions (outpatient, emergency room, hospital ward, COVID-19 screening center (including public health centers), etc.)

2) Reporting

 (Healthcare Institution) Confirm whether an inpatient qualifies under the criteria for "patient under investigation" based on: history of international travel, exposure to patients, proximity to domestic cluster, and clinical symptoms.

➤ [Form 1] Infectious Disease Reporting Form

 (Public Health Center in the jurisdiction of Healthcare Institution) Ensure the healthcare institutions report via the online infectious disease report procedure on the Health and Disease Integrated Management System



 After selecting "Suspected case," input "Patient under investigation" in the notes section (special remarks) of the reporting form

[Categorization of a Patient Under investigation]

Category I: Cases with pneumonia of unknown etiology or suspected COVID-19 infection, according to physician's clinical judgment

Category II: Symptomatic cases with known travel history to China or other countries with COVID-19 outbreak

Category III: Symptomatic cases related to domestic clusters

B. Measures to be taken by healthcare facilities

- o If a test is negative, educate the patient on topics such as personal hygiene according to [Appendix 6 of COVID-19 Code of Conduct]. If symptoms worsen, instruct the patient to first call the Korea Centers for Disease Control and Prevention (☎ 1339, area code +120) or the public health center in the jurisdiction of the patient's residence.
- If a test is positive, follow the protocol for responding to confirmed cases.

Process for Managing Examinees in COVID-19 Screening Centers (Health Centers)

A. Patient admission

- Confirm patient information and classify the patient by clinical signs/symptoms, physical examination (if necessary), etc. according to case definitions
 - i. Check for any history of overseas travel (visits), contact with confirmed patients, etc. via patient interview by receptionist/physician and use of the examinee qualification inquiry/DUR/ITS
 - *As of 3/5/20, the DUR/ITS is only offered for travel histories to and from China, Singapore, Thailand, Hong Kong, Vietnam, Macau, Japan, Taiwan, Malaysia, Iran, and Italy. Travels to and from all other countries should be checked through patient interview. *DUR (Drug Utilization Review): program that promotes patient safety by monitoring drug prescription, dispensation, and use
 - *ITIS (International Traveler Information Systems): program that provides overseas travel history
 - ii. Check whether the patient currently has a fever (over 37.5°C) or respiratory symptoms (cough, dyspnea, etc.)
 - Use a non-contact or tympanic thermometer
 - iii. Check whether the patient has suspected symptoms related to COVID-19, such as pneumonia of unknown etiology, according to the physician's clinical judgment

B. While waiting for admission: continue wearing a mask, complete self-examination questionnaire

C. Patient evaluation

- Confirm clinical symptoms and medical history
- Determine whether testing is necessary
- Classify patients according to case definitions
- Obtain brief medical history (if obtained without direct patient contact, replacement of Personal Protective Equipment is not necessary)
- If the patient falls within case definitions, provide instructions for specimen collection. If the patient does not qualify but requires treatment, redirect to general practice (e.g. ER, outpatient)

D. Response guidelines

- (Patient Transport) Transport patient to an isolation room or (if there is no isolation room)
 a separated area
- (Collection and Transport of Specimen) Collect and store in designated containers
 ➤ WII. Laboratory testing management → Refer to 1. Specimen collection, 3.
 Specimen transport

- One sample from the upper airway (nasopharyngeal and oropharyngeal swab). If there is phlegm, also obtain a sample from the lower airway.
- The sample collector must wear Personal Protective Equipment (medical-grade mask (KF94 or higher), a disposable waterproof long-sleeved gown or full-body protection suit, disposable gloves, goggles or a face shield, etc.)
- (Case Reporting) Report the occurrence of Class 1 Infectious Disease Novel Infectious Syndrome to the local public health center
 - ❖ In the report, select "Suspected Case" in the notes section (special remarks), then classify as either "Suspected Case" or "Patient Under Investigation."
 - > IV. Refer to the guidelines for the occurrence of suspected cases/patient under investigation
- Disinfection and ventilation
 - Disinfect all door knobs, waiting room chairs, reception desks, examination room beds, sampling rooms, furniture surfaces, and floors according to the patient's movement
 - If the sampling room is indoors, ventilate the space for at least 30 minutes. If samples
 are to be collected outdoors, no ventilation is required but sampling must be conducted
 in an isolated space where no other person is present
 - ◆ For more detailed information, refer to the guidelines for "Coronavirus Infection (COVID)-19 Screening Centers"
- (Additional Information) End exam by informing examinees on how they will be notified of test results and advising them on staying-at-home and other public health topics

V. Response Guidelines for Confirmed Cases

1. Reporting Confirmed Cases and Deaths

A. Reporting and registration

- Upon identifying a new confirmed case (including death), the public health center shall immediately report the case to its respective city/province and the KCDC by phone and register the case in the system portal (Health and Disease Integrated Management System)
 - * Positive test results must be registered within the same day of testing. For cases registered within the same day, the KCDC Emergency Management Office will assign the test confirmation number

> [Form 1] Infectious Disease Reporting Form

- Upon identifying the death of a confirmed patient, the healthcare facility that first identified
 the case (or the public health center in the jurisdiction where the healthcare facility is
 located) shall immediately report the (probable) cause and time of death to the KCDC
 Emergency Management Office and register the disease occurrence and death in the
 system portal
 - > [Form 2] Report of Death (Post-mortem Inspection) Relating to Infectious Disease

[Steps for reporting new cases or deaths]

- ◆ Contact the KCDC Emergency Management Office: ☎ 043-719-7979, 7790, 7878, 7789
- ◆ Report the case via the system portal: "Health and Disease Integrated Management System (http://is.cdc.go.kr) Patient Monitoring"
- Report any status changes of confirmed cases (e.g. new symptom development, worsening conditions, death, discharge from the hospital, release from quarantine) through the [Form 6] COVID-19 Case Management Report (Confirmed Case) form
 Report through the "Health and Disease Integrated Management System (http://is.cdc.go.kr) Patient Management Patient Information Management" (Note that this system is currently undergoing updates; completion of system updates will be announced on the website's bulletin board)
 - ➤ [Form 6] COVID-19 Case Management Report (Confirmed Cases)

2. Isolation of Confirmed Cases

➤ Refer to [Appendix 7] for classification of patient severity and allocation of hospital beds

A. Public health center in charge

 The public health center in charge is the public health center that first identified the case or the public health center in the jurisdiction of the patient's residence.

- The public health center that first identified the case shall conduct immediate isolation for the confirmed cases if the test results returned positive while the patient waiting at the public health center
- If a patient is confirmed after returning to his/her residence, isolation shall be conducted by the public health center in the jurisdiction of the patient's residence.
- Assess severity of the case based on key indicators, including but not limited to the patient's level of alertness, body temperature, and risk factors (refer to Appendix 7)
 - The public health center that first identified the case shall assess the patient's severity if the patient tests positive while waiting for care at the health center
 - If the patient tests positive after having returned to his/her residence, the public health center in the jurisdiction of residence shall assess the patient's severity

B. Cases that require hospital isolation

- Contact the municipal COVID-19 Patient Management Task Force to request patient severity assessment and allocation of available hospital beds
 - (Municipal COVID-19 Patient Management Task Force) Severity Assessment Team
 classifies severity according to severity scores and risk factors; Bed Allocation Team
 identifies the status of bed availability that meets the severity classification within the
 jurisdiction
 - Prioritize patients with moderate to severe symptoms (excluding asymptomatic patients and those with mild symptoms) and assign a hospital bed immediately. Report the assignment to the public health center
- (Public health center) Upon confirmation of hospital bed assignment, the public health center shall:
 - Transfer the patient to the appropriate medical facility by ambulance or other means of transportation
 - Notify the patient of hospitalization processes (treatment indication, admission process, treating healthcare facility, etc) and need for inpatient treatment

> [Form 3] Inpatient Treatment Notice

- (Healthcare facility) When patient transfer to another healthcare facility is required in the
 course of treatment (due to worsening of symptoms, for example), the initial treating
 healthcare facility should report the transfer to the municipal COVID-19 Patient
 Management Task Force (local public health center) and carry out the transfer to the
 healthcare facility to which the patient has been re-assigned
 - ❖ In case of hospital bed shortage in the municipal area, contact the "Transfer Support Emergency Management Office" for patient transfer and hospital bed allocation
 - ➤ Refer to section VI. on "Hospital bed allocation and patient transfer"

C. Cases not requiring hospital isolation

(Candidates)

- Among hospitalized patients, those who meet the discharge criteria according to the physician's judgement
- Among confirmed patients, those who do not meet the criteria for hospitalization according to the patient's level of severity

i. Eligibility for admission to a Residential Treatment Center

- The physician-in charge-determines that a patient needs admission to a Residential Treatment Center according to the discharge criteria or severity classification
- The patient is a candidate for self-quarantine but conditions are not adequate (self-reliance at home is difficult or no individual room is available, an appropriate residence is not available, living with a member in high-risk groups*, etc.)
- A local government authority determines that the patient should enter a Residential Treatment Center for any other reason
- * See Appendix 7: Severity Classification for definition of high-risk groups

ii. Eligibility for self-quarantine

- The patient's health status meets the discharge criteria and is stable enough for self-quarantine
- The patient can be self-reliant in an individual space (separate bedroom, toilet, sink, etc.)
- The patient has no problem acquiring daily necessities such as food
- The patient does not live with a member of high-risk groups*
- * See Appendix 7: Severity Classification for definition of high-risk groups
 - (Management Procedures) Public health centers should check whether self-quarantine is possible, and then contact the municipal patient management groups. This group will determine the appropriate isolation level (isolation in a facility or self-quarantine) and notify the Health Department
 - (Management Methods) The public health center in the jurisdiction of the patient's
 primary residence should issue the hospitalization notice, rules and regulations to be
 followed during the quarantine period, and instructions on COVID-19 testing procedure,
 symptoms monitoring and recording, and report of any changes to the patient's major
 symptoms (such as symptom onset, worsening of symptoms, and/or deaths)
 - > [Form 3] Inpatient Treatment Notice (hospital / home / facilities)
 - > [Form 6] COVID-19 Case Management Report (Confirmed Cases)
 - > [Form 7] Self-Isolated/Quarantined Patient Monitoring Log
 - > [Form 8] Patient Health Monitoring Log
 - i. (Residential Treatment Center) The health manager (medical staff in charge) monitors and records the patient's symptoms (twice per day)
 - When major events such as transfer, discharge, death, and/or release of quarantine occur, report them to the local public health center
 - In the event of symptom onset and/or deterioration during the isolation, the facility's
 health manager (medical staff in charge) should be notified. Transfer the patient to a
 medical facility and notify the public health center within the jurisdiction of the patient's
 primary residence
 - In the case of a shortage of hospital beds, notify the public health center within the jurisdiction of the patient's primary residence to request a bed assignment

- ❖ A public health center within the jurisdiction of the patient's primary residence is the main management entity; however, if a transfer across cities and/or provinces is required, this is deliberated by all involved parties
- ii. **(Home Isolation)** The public health center manager should monitor and record symptoms twice a day
 - If symptoms arise or worsen during the isolation period, the public health center should report to the municipal patient management team (hospital assignment team), which assigns hospital beds as necessary

[If hospital care/treatment is needed or expected for the self-isolating person]

- Maintain home isolation if not urgent
- o If urgent:
 - Ensure the monitoring manager is contacted
 - The manager should wear personal protective equipment as necessary and provide a vehicle (ambulance recommended) and refer to a hospital that can treat and isolate symptoms
- o If urgent treatment is expected:
 - Perform COVID-19 diagnostic test the day before treatment, confirm negative result before starting treatment according to standard protocol
 - * Ensure the self-isolating person wears a mask and check symptoms such as body temperature before leaving home isolation, guiding the person throughout the process of leaving isolation and going outside
 - * Regularly check symptoms such as body temperature, respiratory symptoms, and any incidence of diarrhea before leaving home isolation

3. Epidemiological Investigation

A. Case study

- A case study must be conducted by the health center that first identifies a confirmed case, promptly reporting the case to the municipal authority and the Korea Centers for Disease Control and Prevention: "Health and Disease Integrated Management System (http://is.cdc.go.kr) -- Epidemiological Investigation -- Class 1 Infectious Disease Management -- Novel Infectious Syndrome -- Basic Epidemiological Survey (Confirmed Cases)"
 - > [Form 5] COVID-19 Basic Epidemiological Survey (Confirmed Cases)
 - ❖ After entering and/or updating epidemiological information in the "COVID-19 Confirmed Cases List (Separate Form)," notify the municipal database administrator daily by 17:00 (Centers for Disease Control and Prevention/Central Disease Control and Prevention Headquarters kcdceid@korea.kr)

B. Close Contacts Investigation and Management (Contact tracing)

- Investigating Agency The health center that first identifies* a confirmed case must conduct an investigation under the direction of the Municipality's Immediate Response Task Force
 - * The health center that initially identifies the confirmed case will conduct the investigation, but if two or more cities and/or municipalities participate in the investigation, response or management, the health center must share the list of close contacts and relevant information with the dedicated personnel from the cities and/or municipalities involved
- The public health center that first identifies a confirmed case should register the close contacts list in the system, and will notify via phone and transfer the case to the public health center within the residential jurisdiction.
 - "Health and Disease Integrated Management System (http://is.cdc.go.kr) -- Case/Patient Management -- Contact Tracing"
 - > [Form 9] COVID-19 Close Contacts Survey Form

<Pre>cautions upon registering individuals to the Health and Disease Integrated Management System>

- For each case, add the name of the confirmed case with whom the individual had contact, as well as a description of the context
- When transferring an individual to another health center, the transfer date should be set to one day after the day of transfer. The assigned health center must be the public health center in the jurisdiction of the exposed person's residence.
- o Issue a quarantine notice from the Health and Disease Integrated Management System
 - <u>Case Management</u> On the day a confirmed case is first identified, the public health center must (within 24 hours):
 - i. Identify family members (including domestic partners) and close contacts and perform self-isolation measures
 - ii. Check for potential exposure in healthcare or community settings
 - ❖ As COVID-19 is highly contagious during the initial mild symptomatic phase, has a short incubation period and is transmitted through close contacts, it is important to identify close contacts early and take swift action
 - If there were potential exposures in healthcare or community facilities (nursing homes
 or social welfare facilities) during the infectious period (beginning from one day before
 the onset of symptoms), the Municipal Immediate Response Task Force should
 conduct an epidemiological investigation and provide support
 - Priority is given to hospitalized patients or health workers
 - A detailed investigation of travel and movement history should be performed if deemed necessary by the epidemic control officer

C. Epidemiological investigation of community or healthcare facilities

1) Preparation

- Confirm preliminary information
 - Patient information Confirm case study results of the confirmed case and basic investigation of contact range
 - * Preliminary investigation to determine the source of infection: domestic and international travel history of the confirmed case and family members, history of close contacts with confirmed cases, history of contacts with close contacts of confirmed cases, and hospital visit history
 - Allocation of personnel Reallocation of regional investigation and response personnel when the quarantine location of the confirmed case differs from the location of close contacts
- o Emergency measures for close contacts and delivery of preparedness checklist
- Quickly identify and immediately isolate close contacts such as family members and report to a public health center if symptoms of close contacts meet the case definition
- Secure contextual information including personnel, clients, and the environment in community facilities, and announce the enforcement of administrative measures for epidemiological investigations and field response

2) On-site response

- Initial situation assessment: Determine immediate actions to be taken, and establish an epidemiological investigation plan and task priorities
- Municipal COVID-19 Immediate Response Task Force: Systematization is needed to enable a cooperative, integrated response with relevant departments
- Epidemiological investigation
 - Advance Notice
 The investigator must inform the patient and any other involved parties (as well as any facilities involved) that investigations will be conducted according to the Infectious Disease Control and Prevention Act.
 - * Infectious Disease Control and Prevention Act, Article 18 Epidemiological Investigation, Article 76-2 Request to provide personal information
 - Patient Investigation Investigate the date of onset of symptoms, movements of
 patient, source and path of infection, domestic and international activity 14 days prior
 to the onset of symptoms, etc.

<Notes on investigating the infection pathway of a confirmed case>

- Obtain information on the patient's activities beginning 14 days prior to the date of onset of symptoms
- Investigate overseas travel history, contact with any existing confirmed cases, use of or employment in community and/or healthcare facilities, relevance to case clusters, and medical history (if necessary, track detailed movements)

<Notes on investigating close contacts of a confirmed case>

- Set the investigation range for close contacts from one day prior to the date of symptoms onset of the confirmed patient
 - ❖ In case of asymptomatic infection, set the range from one day prior to the test sample collection date
- The Municipal Immediate Response Task Force should determine the investigation range for close contacts based on symptoms of the confirmed case, whether masks were worn, length of stay during travels, exposure condition and duration (within 14 days of the last contact with the confirmed case)s
 - ❖ Transmissions typically occur in situations where respiratory droplets are released, including cohabitation, eating together, worship, lectures, karaoke, and meetings. Therefore, a prompt epidemiological investigation and self-quarantine are necessary. Conduct further investigations as needed.
 - Facility/Environmental Management Manage facilities including patient's residence and activity locations (work, school, hospital, etc.)
 - * Related: (Infectious Disease Control and Prevention Act Article 47) Disinfection and temporary closures, etc. at the discretion of the Director of the public health center
 - Contact Tracing Investigate and classify close contacts by time and place of exposure
 Based on the results of the investigation, conduct a secondary situational assessment
 to review the date of symptom occurrence, and reset the exposure and contact range

Examples under the definition of close contacts (Based on WHO as of 2/27)

- 1) A person who has directly examined or cared for a confirmed patient without appropriate personal protective equipment (Appendix 9)
- 2) A person who has been with a confirmed patient in a close or intimate setting in the same place (family, workplace, classroom, meeting, etc.)
- 3) A person who used the same means of transportation as a confirmed patient and was in close proximity (within 2 meters*) in the 14 days following the confirmed patient's symptoms onset. *Note, however, that the distance suggested by the WHO is 1 meter

<Example>

- ① A person who was within a 2-meter distance from a confirmed patient in a ward or waiting room in a health facility, for a substantial amount of time, without wearing appropriate protective equipment (i.e. medical staff, caregivers, etc.)
- * If a person is deemed **not exposed** based on **correctly wearing a mask** (covering both nose and mouth, with a tight fit around the nose), **conduct health education and passive monitoring.**
- ② A person who was with the confirmed patient for a considerable amount of time within the same space based on daily routines (e.g. colleagues at work, classmates, etc.)
- ③ A person who used the same means of transportation with confirmed patients

- * This applies to passengers who sat within three rows of the confirmed patient's seat on an airplane or other vehicle, as well as the flight attendant(s) managing the section containing the confirmed patient's seat
- ④ A person who has been directly exposed to infectious secretions of a confirmed patient without wearing appropriate protective equipment. (e.g. sample collection, laboratory diagnosis, patient's respiratory secretions, coughs, etc.)
- ⑤ A person who had hand-to-hand contact within 2 meters or had a face-to-face conversation with a confirmed patient without wearing appropriate protective equipment

【 Tracking movements (e.g. travel routes) of a confirmed patient and tracing contacts 】

- Prioritize identifying the patient's movements through the patient interview, to begin prompt preventive measures. Investigations using GPS*, DUR**, and card usage data** should only be performed when deemed necessary by a municipal epidemic control officer.
- * GPS inquiries can be requested from municipalities and city/county/district police stations (Infectious Disease Control and Prevention Act) Article 76-2 (2))
- ** Inquiries using DUR and card usage history should be requested by the municipal epidemic control officer through the official or equivalent computerized system of the Centers for Disease Control and Prevention

【 Scope of disclosure of movements (e.g. travel routes) of traced contacts 】

- Subject to Disclosure Patients with infectious diseases* as defined under 「Prevention of infectious diseases」 Article 2 (13)
- * A person who has been confirmed with a disease, showing symptoms from infection by a pathogen
- <u>Scope of Disclosure</u> Information relevant to the prevention and management of infectious diseases, deemed as an epidemiological necessity
 - <u>Time Period</u> From 1 day before* occurrence of symptoms until date of quarantine
- * Apply update from the 5th edition of COVID-19 Response Guideline (2/7): From "Date of symptoms occurrence" to "1 day before occurrence of symptoms"
 - <u>Location</u> Places (including means of transportation) where close contacts* would have occurred, considering the probability of infection based on time and spatial factors.
- * Determine the investigation range of close contacts with holistic consideration of the symptoms of the confirmed patient, whether or not he/she wore a mask, length of stay during travels, exposure context and timing.

[Reference] Work standards for health workers who have had contact with COVID-19 patients and suspected patients

Epidemiological risk factors	Level of exposure	Recommended monitoring*	Work limit for asymptomatic health workers
① A health worker performing a medical procedure without Personal Protective Equipment (unprotected eyes, nose or mouth)¹¹) or otherwise present in the same space where such procedures are taking place → Procedures that may produce more concentrated respiratory droplets or aerosols (e.g. cardiopulmonary resuscitation, intubation, extubation, bronchoscopy, nebulizer therapy, sputum induction)	High	By the health facility/agency	14-day suspension from work since the last contact date
② A health worker performing aerosolizing procedures without a gown and gloves, or otherwise present in the same space where such procedures are taking place → Procedures that may produce more concentrated respiratory droplets or aerosols (e.g. cardiopulmonary resuscitation, intubation, extubation, bronchoscopy, nebulizer therapy, sputum induction) Note: Classify as ① if the health worker's eyes, nose or mouth were not protected during the aerosolizing procedures	Medium	By the health facility/agency	14-day suspension from work since the last contact date
③ A health worker without Personal Protective Equipment (unprotected eyes, nose or mouth)¹) → Close contact with a patient not wearing a mask Note: Applicable to unprotected eyes during close contact with a patient not wearing a mask	Medium	By the health facility/agency	14-day suspension from work since the last contact date
 ④ A health worker without Personal Protective Equipment (unprotected eyes, nose or mouth)¹¹ → Close contact with a patient wearing a mask 	Medium	By the health facility/agency	14-day suspension from work since the last contact date
⑤ A health worker without gloves and unable to practice hand hygiene → Direct contact with a patient's secretions / excreta Note: Classify as low risk if hands are washed immediately after contact	Medium	By the health facility/agency	14-day suspension from work since the last contact date
 ⑥ A health worker wearing a mask → Close contact with a patient wearing a mask 	Low	Self-monitoring	-
 ⑦ A health worker wearing all recommended protective equipment (e.g respirators, eye protection, gloves and gowns) → Close contact with or handles a patient's secretions / excreta 	Low	Self-monitoring	-
 ® A health worker without the recommended protective equipment → Simple interactions* with a patient * Entering a patient's room without contact, etc. 	Low	Self-monitoring	-

A health worker with neither direct contact with patients nor patients' secretions/excreta, and no entries to patient rooms	None	-	-
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^{*} Monitoring up to 14 days after the last potential exposure

1) When PPE is not worn on the designated body parts

Source: Interim US Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease 2019 (COVID-19)

https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html

◆ Refer to Coronavirus Disease 2019 (COVID-19) practical guidance for medical facilities (2/22/2020)

3) Action plan

- Risk assessment and management method
 - Municipal epidemic control officers or epidemiologists should evaluate exposure, facilities/environment, and operational personnel; then establish a management plan based on a field investigation.
 - · (Risk assessment) Exposure period, scope, level
 - \cdot (Contact tracing) Age, underlying conditions, level of independence/self-care capacity, etc.
 - · (Evaluation of facilities) Available space for placing confirmed cases and close contacts (contactees)
 - · (Operational capacity) Personnel to manage confirmed cases and close contacts, and infection control
 - Manage patients and contact tracing to minimize additional spread of disease and severe cases, with consideration of risk levels.
 - Establish monitoring systems and facility management plan*.
 - * Contact tracing within and outside health facilities, management of patients/guardians/staff, management of visitors, sanitation/sterilization of facilities, improvement of infection control, strategy to prevent community spread
 - If necessary, discuss management method* with the Rapid Response Team of the Central Epidemic Countermeasures Headquarters before deciding on a method.
 - * Determine whether or not to close health facilities such as emergency rooms/hospital wards/outpatient facilities/examination rooms, and the scope (level) of closure/measures to take
- Management of confirmed cases
 - Public health centers are assigned with confirmation of additionally traced close contacts
 - Confirmed cases under management will be released from quarantine as long as the criteria for quarantine release is met
- Contact tracing
 - Public health centers issue quarantine notices to close contacts, conduct public health education and manage contacts by supplying self-quarantine kits, etc.

* Depending on progress of the investigation, should precautionary measures be necessary, the first health center to recognize the close contact will guide the investigation

> [Form 4] Quarantine Notice

- The municipal data manager reports to the Health and Disease Integrated Management System (http://is.cdc.go.kr) until the case is concluded.
- The municipal rapid response team concludes its activities when the close contacts' incubation period after contact with the confirmed case has elapsed and no further confirmed cases arise among the close contacts
- Cases where there is risk of additional infection
 - Applicable situation: If a hospitalized patient develops symptoms, if a staff member of a congregate facility becomes a confirmed case or if there has been extensive-long term exposure* to anyone during the incubation period
 - * e.g. Multiple visits to healthcare facilities and/or attending crowded events
- Additional measures for each situation (summary)

Situation	Facility and environment management	Contact management	Human resources management
Hospital	 Consider temporarily closing Hospital Environmental inspection Disinfect premises and reopen 	1 room per patient or attempt cohort isolation Medical staff self-quarantine	· Assign substitute workers
Congregate facility	Consider temporarily closing facilities Environmental inspection Disinfect premises and reopen	Severe cases are transferred to a hospital (When hospital transfer is difficult) - Isolate individual or attempt cohort isolation Contain all contactees (If not possible) - Isolate individual or attempt cohort isolation	· Assign substitute workers
Broad exposure	Evaluation of exposure by facility Control and disinfection	Confirm and manage contact(contactees), prepare an organized system for departments to respond to (Police, Fire department, etc.)	-

^{*} Decisions should be made after the evaluation of the situation by the metropolitan / province epidemiological investigator

[◆] Coronavirus Infectious Diseases-19 Refers to guidelines for management of medical institutions with confirmed patients (20.3.4.20)

> [Appendix 8] Quarantine of the same group (cohort quarantine)

- Determining the scope and method of quarantine for congregate facilities
 - · (Containment scope) Evaluate the risk of contamination (confirmed patient's condition, activity patterns, movements, number and range of contactees* etc.) and quarantine any related area (floor, living area, dormitory)
 - * Criteria: Check clinical status of confirmed patients (respiratory symptoms such as cough and presence of pneumonia), determine whether or not to wear a mask, and observe characteristics of residence space (air conditioning, ventilation, structural division, etc.), record residence time, space usage and transportation used (elevators, etc.)
 - · (Isolation procedures) Determine according to the characteristics of confirmed patient's occupied space, movements, and facility's capability (Individual quarantine, cohort area quarantine)
- Determining the closure of community facilities
 - · If the risk of transmission is high and the containment range is too wide, the immediate response team decides whether or not to close the facility (Determine whether or not to admit all contactees into a hospital setting or to have as outpatients)
- If it is difficult to transport a confirmed patient from a community facility to a hospital
 - · Establish a management plan with an infection control expert
 - · Relocate the patient from the common living areas to a separate space and isolate in a one-person room or isolate as a cohort
- Managing contact within congregate facilities
 - · Self-guarantine when independent living is possible, if not, isolated within the facility
 - · A single room per person is default. Other methods to minimize infection such as cohort isolation is applicable depending on the facility circumstances
 - · Monitor fever, respiratory symptoms, diarrhea symptoms (2 times / day)
- Quarantine release and resumption of operation for congregate setting facilities
 - · (Decision to release from quarantine) There is no additional occurrence of confirmed patients, and the quarantine period for all contacts has elapsed.
 - \cdot (Operation resumed) City/ Province COVID Immediate Response Task Force confirms the infection control plans and actions and decides.

4) Status report

- Municipal COVID Immediate Response Task Force creates and sends a daily report of investigation / management result of the cases of congregate facilities or medical institution to Center for Disease Control and Prevention (kcdceid@korea.kr)
 - ➤ [Form 10] Daily Situation Report of Epidemiological Investigation by Municipal COVID Immediate Response Task Force

5) Cooperative work

Provincial Regional Disease Control and Prevention Headquarters Support Team

- (Operating principle) Based on the results of the site assessment of the City/ Province COVID Immediate Response Task Force, regional Disaster Safety Countermeasures Headquarters forms support team for each sector *
 - * Quarantine team, medical support team, life support team, field control team
- Management of unusual matters including sharing results on progress until the end of the situation
- Major measures for the Regional Disaster Safety Countermeasures Headquarters

Division	Role	
Facility and environment management	Movement restrictions, closing certain places, disinfecting the environment, etc. Disinfection of Congregate Setting and Public Facilities used by Confirmed Patients (2-1 Edition)	
Close contact management	 Life support and active monitoring of the quarantined personnel Transfer to Screening Clinic when symptoms develop. 	
Waste management	Linens used by patient, medical tools, infectious waste, etc. * Be careful not to have direct physical contact when handling waste	
Etc.	Maintain a cooperative system with related organizations (fire department, police, medical institutions, etc.)	

< Transfer of inpatients due to closure of medical institution >

Municipal Disease Control and Prevention Unit Headquarters support team secures and supports resources for relocating patients

- 1 Secure temporary quarantine hospital
- ② Check the necessity for facility operation (beds, medical equipment, medicines, medical supplies, etc.)
- 3 Prepare essential supplies, such as water and food
- 4 Operating personnel (medical staff and medical assistants, etc.)
- 5 Facility control, guardian and visitor management

6) Data management

- Basic principles
 - (Basic directions) The epidemiologist charged with the initial investigation and the DB administrator of the city/county/province office maintain close coordination in verifying and updating the DB until the patient is released from monitoring.
 - (Designation of DB administrator) The quarantine officer designates city/county/province DB administrator and assigns tasks.

- (Coordination management) DB administrator maintains contact network with liaisons in the municipal or city/county/province offices until case reaches final disposition
- On-site response stages
 - (Task assignment) The quarantine officer assigns personnel for city/county/district
 "Status report," "Contact DB management"
 - * In the case of two or more cities and provinces involved, each city and province's quarantine officer assigns a person in each city and province.
 - (Task relegation) The quarantine officer ensures that "daily situation report" and "contact DB" are "managed" by the local governments and "reported" centrally with the same criteria until the situation resolves.

4. Release From Quarantine

A. Criteria for releasing confirmed patients from quarantine

[Criteria for releasing confirmed symptomatic patients from quarantine]

- o Criteria for release from quarantine must meet clinical and examination criteria.
 - ① (Clinical criteria) Not taking antipyretics, no fever, improvement of clinical symptoms
 - ② (Examination criteria) Two negative results of PCR tests taken at a 24 hour interval
- o If clinical criteria are met, the patient can be discharged and be in self-quarantine or facility quarantine, even if examination criteria have not been met. To be released from quarantine, examination criteria must be met.
 - ① (Examination criteria) Two negative results of PCR tests taken at a 24 hour interval

[Criteria for releasing confirmed asymptomatic patients from quarantine]

- Patients can be released from quarantine when the following examination criteria are met.
 - ① Two negative results of PCR tests taken at a 24 hour interval, 7 days after the patient was confirmed of infectious disease
 - ② If the result of the PCR test, taken 7 days after the patient was confirmed of infectious disease, is positive, medical professionals will determine the future testing time (10 days after, 14 days after, etc.). The patient can be released from quarantine after two negative results of PCR tests taken at a 24 hour interval.

1) Discharge and management of inpatients in quarantine

- The public health center that has jurisdiction over the patient's residential area is responsible for managing the patient's condition and discharge schedule.
- (Healthcare facility) When the patient is discharged, they must be notified to the local public health center.
- (Measures for discharge and quarantine)
 - If the patient is released from quarantine: Patients are instructed to return home or to original place of residence using transportation means at disposal. The public health center in jurisdiction should provide health education and guidelines to follow for 2 weeks.

$ightharpoonup \mathbb{II}$. Case definition and management method ightharpoonup 3. Management (monitoring) method ightharpoonup b. Refer health education p10

- ii. If the patient needs to maintain quarantine after discharge: Use own vehicle, walk, or use an ambulance*(fire station, public health center) to return home or to a residential facility (medical grade mask worn at all times)
- (Public health center) Enter hospital discharge and post-discharge quarantine information to the Health and Disease Integrated Management System.
- Reissue notice for hospital treatment (self or facility) in case of self- or facility quarantine.
 Do active monitoring (quarantine notice, distribution of information/instructions, and education)
 - ❖ Report of discharge and self-quarantine: Health and Disease Integrated Management System(http://is.cdc.go.kr) Patient management Patient management Patient information management (currently updating the system; completion will be notified on the bulletin board of the Health and Disease Integrated Management System)
 - ❖ In case of confirmed patients 2. Confirmed patient quarantine C. In case where hospital quarantine is unnecessary refer to the management method

> [Form 6] COVID-19 case management report (confirmed cases)

- > [Appendix 5] Guidelines for self-quarantined patients
- ❖ Based on clinical assessment, the attending doctor may discharge a quarantined patient in the negative pressure room to a designated hospital, residential treatment center, or home for self-quarantine.
- If a test is necessary while quarantined at the residential treatment center or self-quarantined at home
 - (Residential jurisdiction public health center for self-quarantined patients)
 Transfer patient to a designated triage center where specimen testing is possible, and request specimen collection and laboratory testing
 - (Residential treatment center) Appropriate medical staff at the facility will collect and test specimen
 - → If two PCR tests conducted at 24 hour intervals are both negative, patients may be released from quarantine. Patients with positive result(s) will remain in quarantine.

2) Quarantine release

- The Residential Jurisdiction Public Health Center should check on the patient's condition
- (Medical institution / residential treatment center) Notify the Residential Jurisdiction
 Public Health Center when releasing patients from quarantine
 - Give precautions* to patients who have been released from quarantine before the end of their 14-day incubation period
 - * Provide guidelines on COVID-19 symptoms, preventive measures, and reporting when symptoms develop during incubation period.
- (Self-quarantine) The Residential Jurisdiction Public Health Center should inform patients of their quarantine release
 - Inform patients that they should immediately contact the Public Health Center in case their symptoms worsen

- Based on [Appendix 6 COVID-19 Precautions], health education should be provided to patients and their families.
- (Public health center) Report quarantine release to the metropolitan and provincial epidemiologists and enter the quarantine release information into the Health and Disease Integrated Management System.

B. Close contact quarantine release criteria

- Quarantine release
 - If close contacts show no signs of symptoms during the 14-day self-quarantine period from the last date of contact with a confirmed patient or from the date the confirmed patient was released from quarantine, the **Residential jurisdiction public health** center should inform them on the 15th day that they are released from quarantine and thus monitoring ends
 - * Active monitoring and self-quarantine are to be in effect for 14 days even if close contacts' test results come back negative
 - However, even if close contacts do not show symptoms, medical institution workers (including caregivers) and families must get tested on the 13th day from the last date of contact with a confirmed patient and receive negative results prior to being released on the 15th day*
- * (Example) Release from quarantine is (04.16.), which is the day after 14 days have passed from the last date of contact (04.01.) (Travelling is now possible)
- Criteria for releasing quarantine for confirmed patients' families
 - · (Families of confirmed patients' who are quarantined in hospitals/facilities) After 14 days have passed since the last contact with the confirmed patient (date that they are quarantined at the hospital/facilities)
 - · (Family living with confirmed patients in home isolation) 14 days from the date of release from isolation of the confirmed patient
- (Notification of release from monitoring) Notification from local public health center in the jurisdiction of the contacted's residence and release of monitoring on the Health and Disease Integrated Management System

5. Prevention and Control Measures

- A. Prevention and control measures refer to measures that prevent the spread of infectious disease during an outbreak
- ◆ Legal basis: Article 47 (Epidemic control measures against Prevalence of infectious disease)

B. Content of the measures

- Measures for places where there are confirmed patients or places that are recognized to have been contaminated with infectious disease pathogens
 - Temporary closure

- ⚠ Refrain from unnecessary closure of buildings other than temporary closure required for disinfection and ventilation
- Restrict public access
- Restrict movement within the place
- Other necessary measures to block traffic
- Suspension of healthcare facilities
- Hospitalization or isolation of a person suspected of being infected with an infectious disease pathogen in a suitable place for a certain period of time
- Prohibiting the use, receiving, displacement, and cleaning of contaminated objects or objects suspected of contamination; Alternatively, burning or disposing the objects
- Ordering disinfection or other necessary measures for places that has been contaminated with the infectious disease pathogens
- Preventing (laundry) washing in certain places; Ordering waste to be treated in certain places

C. Distribution of forms related to prevention and control measures according to relevant regulations

- ❖ When distributing disinfection orders, relevant public officials must specify the execution time and the end time of disinfection.
 - > [Form 11] Prevention and control measures form, [Form 12] Disinfection certificate

VI. Bed Assignment and Transfers

The following contents should be applied flexibly according to local conditions.

1. Establishing a Bed Assignment and Management System

- (Overview) Municipal governments should accurately identify the availability and capacity of hospital beds, hospitals and medical resources in the region and establish patient management and infection management teams for the allocation of hospital beds.
 - City/county/district governments should set up a system for assessing case severity of confirmed cases and rapidly reporting high-risk cases (the elderly or those with chronic health conditions).
- (Identification of resources) Municipal patient management teams should identify the
 availability of negative pressure rooms, single rooms, ICU beds and equipments** for
 severely and critically ill patients, as well as staff availability across both public and private
 hospitals*.
 - Concurrently, there should be efforts to establish a prearranged plan in order to immediately respond to future demand
 - * In addition to the nationally designated isolation beds, the available capacity across designated infectious disease treatment hospitals, regional medical institutions, national hospitals, police hospitals, veterans hospitals, military hospitals, and local medical centers has to be identified
 - ** Number of institutions with ECMO (extracorporeal membrane oxygen supply), CRRT (continuous renal replacement therapy), etc. and number of available devices in each institution
 - ❖ In the event that a soldier (active military personnel, etc.) is confirmed or suspected to have infection, contact the Armed Forces Medical Command (1688-5119, 031-725-5119) to assign and isolate the patient at the **National Military Capital Hospital** (Military Designated isolation bed) or at a military hospital designated as a national infectious disease control institution

2. Bed Allocation and Management Principles

- (Severely ill patients) Upon assessment of case severity, prioritize high-risk patients and immediately assign beds for medical care.
- (General ward) Completely separate admitted confirmed patients from general inpatients, operate wards independently.
 - * (Air-conditioning) Air supply should be sourced 100% from outside air, instead of a mixed circulation method combining outside air (30%) and inside air (70%)
- (Patients awaiting hospitalization) Assess risk level based on the level of consciousness, age, and underlying health conditions (chronic diseases, organ transplant history, etc.),

continuously monitor* until admission to hospital unit for patients with moderate symptoms.

* Local governments must establish and operate a 24-hour consultation system

3. Patient Transportation

(Transportation measures)

- Transfer patient to an assigned hospital bed
- During the transfer, suspected (confirmed) patient should maintain wearing surgical mask
- Transfer personnel should wear appropriate personal protective equipment*
- * Transfer personnel: full body protective clothing (including overshoes), KF94-equivalent respiratory protection device, disposable gloves, goggles (or face shields).

➤ [Appendix 9] Reference on the use of personal protective equipment related to COVID-19

- Ambulance drivers must wear personal protective equipment* (KF94-equivalent respiratory protection device and disposable gloves)
- * However, if the ambulance driver's seat is not completely walled off or if there is risk of contact between the driver and suspected or confirmed patients, drivers must wear full body protective clothing (including overshoes), KF94-equivalent respiratory protection device, and disposable gloves (wear goggles or face shields if necessary).

4. Patient Transfer

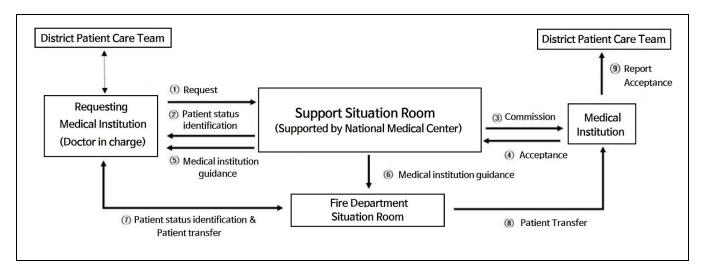
- Procedures for transferring severely ill patients between municipalities
 - 1) Applicable healthcare facility (doctor in charge) should request transfers to the Transfer Support Team at the National Medical Center (1800-3323)
 - 2) The Transfer Support Team, in consultation with the requesting healthcare facility, will determine transfer eligibility, and the healthcare facility will later report the decision to the municipal government

Notes

- Transfer request may be dismissed for cases determined by medical staff as mild
- Prior to requesting transfers with the Transfer Support Team, municipal patient management teams and requesting healthcare facilities must make due effort to accommodate patients within the municipality
- Requirements for cooperation between municipalities
 - Make due effort to transfer patients within the municipality or to arrange a direct transfer agreement with another municipality prior to requesting transfers with the Transfer Support Team
 - Secure ICU capacity for severely ill patients by constantly re-assigning patients under recovery or patients with mild symptoms to appropriate wards or designated hospitals for infectious diseases

 Records required for transfer requests (mandatory): i. Patient status (case severity, age, underlying health conditions, history of dialysis, cancer, mental illness, etc.), ii. Patient location (name of healthcare facility, etc.), iii. Contact information of medical staff member available for consultation regarding patient condition

Inter-municipal transfer system for severe cases



- Other notes
 - 1) Materials * sent to the receiving institution must be delivered in a ziplock bag to prevent further infection
 - * Medical records, information such as CT / X-ray (CD, etc.)
 - 2) Transportation details (departure time etc.) * must be shared with Transfer Support Team upon departure
 - * Contact information of vehicle operator or accompanying personnel, license or qualification information of accompanying personnel, vehicle number
 - 3) Transfer should be carried out using an infection-controlled vehicle such as an ambulance
 - 4) Medical staff must accompany the patient; receiving institution must be contacted if the patient's conditions worsens during the transfer (Advance preparation for urgent situations such as cardiac arrest or ECMO)

VII. Management of Deceased Persons

1. Purpose

- Prevent disease spread and social unrest through efficient and prompt protocols for handling corpses and supporting funerals in cases of death attributed to COVID-19
- ◆ Legal basis: Article 20-2 of 「Infectious Disease Control and Prevention Act」 (Methods of Conducting Funeral, etc. for the Deceased)

2. Principles

- Facilitate a systematic and efficient funerary process while upholding the dignity of the deceased and respecting the wishes of the family of the deceased
 - As a principle, bodies shall be disposed through cremation so as to prevent the spread of infection. With consent of the family, bodies shall be cremated *prior* to the funeral.

Sample processes for cremation and funeral ceremony

- ① Healthcare Facility (Disposal and casketing of corpse) \rightarrow Cremation Facility (Cremation) \rightarrow Funeral Hall (Funeral Ceremony)
- ② Healthcare Facility (Disposal and casketing of corpse) → Funeral Hall (Placement in mortuary) → Cremation Facility (Cremation) → Funeral hall (Funeral ceremony)

3. Scope and Responsibilities

- Scope: Handling of deceased bodies and facilitation of funerals for deceased persons in cases confirmed as COVID-19 infection by healthcare facilities etc.
- Role: Central Disaster Management Headquarters, Funeral Support Center, local governments, healthcare facilities, and mortuary facilities (crematories, funeral halls, etc.) fulfill respective roles while maintaining close coordination with overseeing bodies
 - (Central Disaster Management Headquarters) Provide general oversight; monitor case status
 - * (Contact) 044-202-3474, 3481, 3471, 3473
 - (Funeral Support Center / 1577-4129) Facilitate reservations for cremation facilities, provide guidance regarding funeral process and use of mortuary facilities, offer on-site support as requested by Center Disaster Management Headquarters
 - (Municipal governments / city, county, district offices) Provide guidance on funeral process to the family of the deceased (explanation)*, arrange vehicle and personnel for transfer to cremation facilities, provide personal protective equipment** (family of the deceased, body disposal staff), disinfection of facilities and equipment (transfer vehicle, cremation facility, funeral hall, etc.), and other measures as appropriate

- * Explain process elaborated in Article 20-2 of Infectious Disease Control and Prevention Act (Cremation)
- ** Respiratory protective devices equivalent to KF94, N95 or higher, disposable long-sleeved waterproof gown, disposable gloves, goggles or face shield, boots, etc.
- (Healthcare facility) Report case status to corresponding agencies (Central Disaster Management Headquarters, local government, funeral hall, etc.), dispose of the deceased in accordance with Infectious Disease Control and Prevention Act
- (Funeral hall) Support the dispose of the deceased, support carrying coffins to cremation facility, process funeral procedures
- ❖ Korea Funeral Association: Provide funeral halls and support smooth funeral procedures (e.g., funeral cars)
- (**Crematory facilities**) Maintain operation at all times for new cremation appointments

4. Step-by-Step Measures

A. Imminent death

- (Healthcare facility) If the patient's condition becomes unstable, immediately notify the family and confirm whether the family will visit.
 - Upon request, family members may visit the patient in the hospital ward with personal protective equipment worn.
 - Inform the patient's family of final disposition procedures for the prevention of infections and ask consent for such procedures in advance.
 - Notify patient's status to the healthcare facility's local public health center
- (Central disaster management headquarters) Notify status to relevant agencies, arrange support for funeral processes.
 - Maintain coordination among funeral support centers, local governments, cremation facilities, funeral halls, etc.
 - Guide local governments to inform the patient's family of suggested protocols for funerals, according to Article 20-2 of the Infectious Disease Control and Prevention Act (Cremation).

B. Death

- (Healthcare facility) Notify status to local public health center; file report of death relating to infectious disease; inform the cause of death to the patient's family and settle the time of final disposition
 - > [Form 2] Report of death (post-mortem Inspection) relating to infectious disease
 - Upon request, allow family of the deceased to examine the corpse, wearing personal protective equipment (families may also examine through a remote connection to a closed-circuit camera of the quarantine ward)
 - If the deceased was a confirmed patient, a medical personnel in personal protective equipment disposes the corpse in accordance with [Appendix 10. COVID-19 Guidelines for the Management of Funeral Processes and Disposal of Corpses] at a time agreed by the family of the deceased

- If the deceased was a suspected patient or Patient Under Investigation, the body remains in the quarantine ward until test results are provided; alternatively, handle as per the protocol for confirmed patients ⇒ If test results are positive, identify as confirmed patient and if negative, handle as per usual protocols.
 - * Even if the patient has died from unrelated causes, if there is reason to suspect infection, it is recommended to follow protocols for handling corpses of confirmed patients.
- o (Funeral Hall) Facilitate disposal and casketing of body
 - The body should be casketed without removing the sealed enclosure; the lid of the casket should be sealed shut.
- (Central Disaster Management Headquarters) Request cooperation of local governments, cremation facilities, funeral halls, etc.
 - (Funeral Support Center) Facilitate reservations for use of cremation facilities, provide guidelines for funeral procedures and use of funerary facilities
- (Municipal Governments / City, County, or District Offices) Advise families of the patient to adhere to procedures elaborated in Article 20-2 of the Infectious Disease Control and Prevention Act (Cremation), make arrangements for the disinfection of facilities and transfer vehicles, provide personal protective equipment when necessary, deliberate funeral and cremation procedures with the family of the deceased, assist in the reservation of cremation facilities
 - Identify family members to attend the cremation procedure, arrange personnel and vehicle for transfer of the body

C. Cremation and funeral

- (Healthcare facility) Release the sealed body from the patient room at a time agreed by the family of the deceased
- (Funeral hall) If the released body requires transfer to crematory facility, support the transfer process
 - Upon completion of the cremation process, carry out the funeral process as agreed by the family of the deceased
 - * Depending on the situation, the body can be placed in the mortuary of the funeral hall before transfer to a crematory facility (if mortuary was used, post-hoc disinfection is required)
- (Municipal Governments / City, County, or District Offices) Deploy personnel and vehicle for transfer of the body; provide personal protective equipment to accompanying family members, transfer personnel, and cremation personnel during the process of cremation; disinfect transfer vehicles and crematory facilities, etc.
 - Following completion of funerary process, report final disposition to Central Disaster Management Headquarters

5. Administrative Matters

- (Municipal Governments / City, County, or District Offices) Maintain communication with the family of the deceased and relevant agencies; provide administrative support
 - Operate and maintain public cremation facilities, funeral halls designated for use in disaster response, etc.

- ❖ If the funeral hall attached to the medical facility is available, the funeral shall be handled therein. If unavailable, the funeral shall be held at a funeral hall designated for use in disaster response.
- Provide personal protective equipment; apply stringent enforcement of disinfection protocols
- Monitor case progression from cremation to the conclusion of the funeral, report outcomes
- (Operation of Funeral Support Team) Funeral Support Team operates at all times: 24 hours a day
 - Construct and manage an integrated system in coordination with relevant agencies (Central Disaster Management Headquarters, local governments, etc.), disseminate status reports
 - Support reservations for cremation facilities
- (Support for funeral costs) Establish plans for reimbursing funeral costs of the deceased with restricted means, according to Article 20-2 of the Infectious Disease Control and Prevention Act
 - * Specific terms and procedures for the reimbursement will be provided separately after reserve funds are procured; reimbursement requests for funerary costs are to be registered at the corresponding City, County, or District Offices
- > [Appendix 10] Guidelines for management of funerary process and disposal of corpses

VIII. Laboratory Testing Management

These guidelines only apply to the following:

- ① Collection and testing of specimens from patients under investigation (PUI) or suspected patients who meet the criteria
- ② Collection and testing of specimens from asymptomatic healthcare workers (including caregivers) who are confirmed patients or have come in contact with confirmed patients for the purpose of quarantine release

1. Specimen Collection

A. Specimen collection site

- (Collection Site) Isolated Specimen Collection Site within the COVID-19 Screening Center or within a site in a medical facility separated from other areas in the facility
 - * However, in the case of home isolation, the specimen collection site may vary based on its location

B. Specimen type and packaging

- (Type of specimen) Collect upper respiratory tract specimen (oropharyngeal and nasopharyngeal swab). Collect lower respiratory tract specimen if patient experiences cough or sputum
 - Patient with mild symptoms : request testing of upper respiratory tract specimens only

No.	Type of Specimen		Type of Specimen Container/Volume	
1	Upper Respiratory Tract	·oropharyngeal ·nasopharyngeal	·(Container) Simultaneous collection of oropharyngeal and nasopharyngeal specimens in one VTM batch	· Specimen must be collected at an isolated specimen collection site
2	Lower Respiratory Tract	·Sputum	·(Container) 50ml sterile tube ·(Volume) 30ml or more should be obtained	·Collect only from patients producing sputum ·Do not induce sputum (may generate aerosol) ·If sputum collection is required for accurate diagnosis, collect in a negative pressure room (if no negative pressure room is available, collect in an isolated area with good external ventilation in order to avoid risk of aerosol generation and spread)

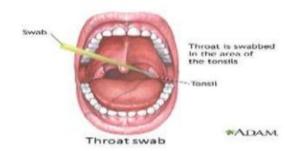
(Required specimen) Upper respiratory tract specimen, (Optional specimen) Lower respiratory tract specimen, blood specimen, etc.

* For confirmed patients: collect additional specimens (blood) after the initial positive testing result and before the release from quarantine. (If possible, also collect fecal and urine specimens)

- Collect 5~10ml (1ml for infant patients) of blood specimens in SST. Collect fecal and urine specimens in sterilized containers.
- ❖ Source: CDC, 2019 Novel Coronavirus, Wuhan, China, Guidelines for Clinical Specimens, 2020.1.17. ver.
- (Upper respiratory tract specimen) Collect nasopharyngeal and oropharyngeal specimens <u>separately</u>, place both specimens in a single VTM batch, and transport with the complete [Form 13] Specimen Test Request Form
 - · Nasopharyngeal swab: Insert cotton swab parallel to the roof of the oral cavity through the nostril to collect discharge by scratching the mid-lower section of the inferior turbinate. Allow absorption of the discharge by pausing the cotton swab in the mid-lower section of the inferior turbinate for a few seconds.
 - · Oropharyngeal swab: Press the tongue down and scratch the posterior pharyngeal wall to collect discharge

<How to collect oropharyngeal swab>

<How to collect nasopharyngeal swab>

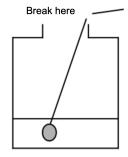




Source: ADAM, Influenza, Pandemic Influenza Division (TEPIK)

How to collect the upper respiratory tract specimen

- Storage of specimen containers
 - Insert cotton swab with specimen into the bottle containing transport medium, and let it soak. Break the cotton swab at the bottle cap and close the lid tightly.
 - When breaking, take care not to contaminate the inside due to contact
 - Specimen containers are immediately stored in the refrigerator (4 °C)
- After collecting specimen, record the patient's identification information (name, sex, age) and collection date on the specimen container
- \bullet Request testing of specimen with completed [Form 13] Specimen Testing Request Form (refrigerate specimen at 4 $^{\circ}\text{C})$



 (Lower respiratory tract specimen) Patients are instructed to rinse their mouths with clean water and cough deeply without saliva into a sterile container (e.g. sputum bucket) to collect sputum * Take care not to contaminate the specimen; seal completely to prevent leakage during transportation (triple packaging)









1. Rinse mouth

Use aseptic containers

Collect sputum by coughing

Fully seal (4 °C maintenance)

How to collect sputum

Specimen Packaging

- Disinfect the primary container containing the collected specimen with 70% ethanol and label it
 - * Display information such as hospital name, specimen type, collection date, patient name, sex, and age
- Wrap the disinfected primary container with an absorbent (e.g. paper towel) and place it inside a secondary container
- Tightly close the lid of the secondary container and place it inside a tertiary container
- Place the [Form 13] Specimen Test Request Form between the tertiary container's lid and then pack the container tightly
- On the outside of the tertiary transport container, write the sender, receiver, and emergency contact information
- Place the tertiary transport container into an ice box, and then insert the refrigerants (ice pack) around all four sides of the container
- Mark the outside of the sealed ice box with the Infectious Substances label, UN 3373
 (Biological Substance Category B) label, package handling label ("This way up"), sender, receiver, and emergency contact information

Table. Triple Packaging Example

Category Primary Container		Secondary Container	Tertiary Container
Packaging Container	Street Annual Control of the Control		and a state of the

C. Precautions

- Precautions: When collecting specimens, it is essential to wear personal protective equipment (PPE) such as KF94, N95, or equivalent respiratory protection, disposable gloves, disposable long sleeve gown or full-body protective suit, goggles or face shield (if necessary, also wear disposable impervious medical apron) and to disinfect oneself after the collection.
- > [Appendix 9] Refer to Use of Personal Protective Equipment Related to COVID-19

2. Testing Request

- Request method: Fill out the [Form 13] Specimen Test Request Form and submit it with the specimen
- > [Form 13] Specimen Test Request Form
- Testing request by institution:
 - COVID-19 Screening Centers within Healthcare Facilities: Healthcare facilities capable
 of testing shall carry out the tests themselves. Otherwise, send specimens to KCDC
 Designated Laboratories for testing.
 - (COVID-19 Screening Centers within Public Health Centers: Send specimens to KCDC Designated Laboratories and request testing.
 - * If unable to request tests at the KCDC Designated Laboratories, request testing at the Research Institute of Public Health and Environment (RIPHE).

3. Specimen Transport

A. Specimen transport management

- When tested at private healthcare facilities: If on-site testing is possible, specimen transportation is unnecessary. If the specimens need to be transported to a KCDC Designated Laboratories for testing, they must be transported following the guidelines of the testing laboratory
- When tested at the Research Institute of Public Health and Environment: The designated personnel at the Public Health Center that first identified the patient should transport the specimens to the assigned Research Institute of Public Health and Environment within the same jurisdiction.
 - * The designated specimen transport personnel must wear KF94, N95 or equivalent respiratory protection and gloves and provide information on the type of specimen, collection date & time, and transport date & time. The verified information must be reported to the Research Institute of Public Health and Environment at Centers for Disease Control and Prevention.

B. Storage conditions during specimen transport

- For specimens to be used in virus isolation or genetic testing: Transport immediately while maintaining the temperature at 4°C
 - * If it is impossible to transport within 72 hours, store at -80 °C and transport using dry ice.

C. Precautions when transporting specimens

- Designate specific personnel for transporting samples
- Comply with the guidelines for Safe Transport of Infectious Substances (provided by the Korea Centers for Disease Control and Prevention)
- Selection of transport vehicles and specimen placement: Packaged specimens are placed and secured in the trunk of a personal vehicle (or designated vehicles). Secure specimens to minimize shaking. Prepare in the vehicle personal protective equipment, contamination treatment equipment (e.g. spill kit), disinfectant, tripods, etc to be used in case of emergencies.
- Selection of driving route and precautions: Designate the shortest distance and safe route and depart only after reporting to the person in charge at the facility. Only take the predetermined route (when using the rest areas, required personnel must remain in the vehicle with the specimens), and abide by the road traffic signals and rules.

4. Conducting Tests

- A. **Testing facilities:** Genetic testing for suspected cases or for quarantine release*

 * In the case of a confirmed case, based on the status of the patient, the primary physician will request testing at an on-site laboratory or at the KCDC Designated Laboratories.

 (If confirmation is required due to indeterminate results, the KCDC may be consulted)
- B. Research Institute of Public Health and Environment: Tests in the following conditions:

 1) for not suspected cases where certain limited testing is required as part of the epidemiological investigation to identify the source of infection 2) when testing at private healthcare facilities is impossible (such as in overnight emergency)

 *Specimens must be collected at the PHC that first identified the case, and the testing requested at the RIPHE in the same jurisdiction as the PHC.
- ❖ If confirmed positive on a test conducted by a testing laboratory, it must be double-checked with the Korea Centers for Disease Control and Prevention (if it is the very first positive test result for the patient). After the double-confirmation requirement for the initial positive test result, individual testing facilities can determine test positivity without the confirmation from the KCDC in subsequent testing of the patient.
- ❖ In the case of an indeterminate test result, the testing laboratory re-examines the remaining sample and determines the final result. (If necessary, the testing laboratory or health facility can re-collect and re-test the specimens themselves, or refer to the KCDC).

5. Reporting Test Results

- A. **(Testing Laboratory)** The testing laboratory notifies the healthcare facility (the Public Health Center or other healthcare facilities) that has requested the test of suspected patients.
 - Public Health Centers or healthcare facilities must enter the test result into the "Health and Disease Integrated Management System (http://is.cdc.go.kr) - Patient Monitoring."
 - The primary healthcare provider at the PHC or the healthcare facility should inform the patient of and explain the test results.
 - △ However, if the test result is positive, report immediately to the KCDC Emergency Management Office by phone (043-719-7789, 7790) and to the Public Health Center that requested the test
- B. (Research Institute of Public Health and Environment) The test result is entered into and reported to the "Health and Disease Integrated Management System."
 - △ However, if the test result is positive, report immediately to the KCDC Emergency Management Office by phone (043-719-7789, 7790) and to the Public Health Center that first identified the case
 - > [Appendix 11] Laboratories and Facilities That Can Test For COVID-19

IX. Environmental Management

[Basic directions]

- ◆ Guide for promptly disinfecting group facilities or public facilities, or residence spaces used by patients
- ◆ Guide for selecting appropriate disinfection methods according to the type and condition of the object to inactivate infectious substances

1. General Principles of Disinfection

- (Disinfection plan) After identifying the places that the confirmed patient has been to, establish a plan including determining the scope of disinfection and the type of disinfectant.
 - Identify the places that the confirmed patient has been to; if the confirmed patient's movement is unidentifiable, set disinfection targets to objects and places that are commonly in contact with the public
 - * (e.g.) Elevator buttons, handrails, door handles, armrests, backrests, desks, lighting controllers, keyboards, switches, etc.
- (Education) Staff in charge of disinfection should receive training on disinfection methods and infection prevention.
- Personal protective equipment mounting, handwashing or hand sanitizing methods, monitoring of symptoms such as fever, coughing, and difficulty in breathing after the disinfection
- Staff responsible for disinfection must wear personal protective equipment* when cleaning or disinfecting
 - * Medical grade masks, full body protective suits or disposable waterproof long sleeve gowns, goggles or face shields, shoe covers or rubber boots, disposable double gloves (outer gloves should be rubber gloves)
- (Disinfecting tools) To the extent possible, use disposable tools or use the tools exclusively for disinfection
 - * However, in the case of cleaning tools that can be reused with washing, disinfect them with an appropriate disinfectant and store them dry
- Criteria for resuming use of the space should consider the type and characteristics of the disinfectant used and the purpose of the space

2. Preparations Before Disinfection

 (Items to prepare) Clothes to change into, exclusive containers for medical waste, buckets, disposable cloth/towels, water, disposable gloves, a medical grade mask, disinfectant, a mop, etc.

- (Personal protective equipment) For daily disinfection, wear disposable gloves and a medical grade mask (KF94, N95, or equivalent mask). Depending on the amount of contamination, add disposable waterproof long sleeve gowns, goggles, boots, etc.
- (Selecting environmental disinfectant)
 - Must be a disinfectant for COVID-19 approved by the Ministry of Environment for disinfection of the environment or object surfaces. Must follow dosage, directions for use, and precautions for each.
 - Disinfectants suggested by WHO, sodium hypochlorite (aka household bleach such as Clorox), alcohol (70%), quaternary ammonium compound, peroxygen compounds.

3. Precautions for Disinfection

- Wear disposable gloves, disposable waterproof long sleeve gowns, goggles or face shields, medical grade masks and boots according to the method of donning for personal protective equipment.
- Do not touch your eyes, nose and mouth during disinfection after putting on personal protective equipments
 - * Wear goggles to keep your hands away from your eyes
- o If gloves or masks become dirty or damaged, remove them safely and wear new ones.
 - * (Recommended procedure) Remove gloves → Wash hands with water and soap → Remove mask → Wash hands with water and soap → Wear new mask → Wear new gloves
- Rub the floor or surface repeatedly with a rag or cloth soaked with disinfectant instead of spraying.
- The method of spraying disinfectants has uncertain coverage and may promote aerosol production. As such, it should not be applied to floor and surface disinfection.
- Manufacturer's guidelines on safe usage (dilution ratio, contact time, application target, etc.),
 handling precautions, etc. recommendations must be followed
 - * Check whether the product is approved by the Ministry of Environment (Green Nuri, http://ecolife.me.go.kr)
- Do not place disinfectants near flammable materials, do not mix different types of disinfectants, and keep disinfectants away from children.
- When using sodium hypochlorite (household bleach), prepare it by diluting (1000 ppm) immediately before disinfection, wipe the surface with the diluted solution, and let it dry for at least 10 minutes.
- For surfaces that are not suitable for sodium hypochlorite (e.g. metal), use alcohol (70%).
- Do not store the remaining amount after using the diluent. Discard.
- Ensure enough ventilation to circulate outside air into the room.
- Remove organic substances before disinfection so that the disinfection effect is not reduced by residual organic substances such as blood

♦ Precautions for cleaning and disinfecting patients' secretions (vomiting, blood, etc.)

: Remove foreign substances on the surface using paper towels soaked in disinfectant or water, then perform disinfection

♦ (Reference) Dilution ratio of sodium hypochlorite disinfectant

Effective chlorine Sodium hypochlorite final concentration (ppm) concentration (%)	Codicina humaahlarita final	Sodium hypochlorite: water mixture ratio		
		4% (40,000ppm) sodium hypochlorite solution	5% (50,000 ppm) sodium hypochlorite solution	
1,000 ppm	0.1%	1 : 40	1 : 50	
5,000 ppm	0.5%	1:8	1 : 10	

4. Precautions After Disinfection

- After completing cleaning and disinfection, take off personal protective equipment carefully so as not to contaminate parts of your body or surroundings with infectious substances that could be on your personal protective equipment.
- Follow the instructions for taking off the personal protective equipment and be careful not to contaminate the surroundings. Immediately after you take off the PPE, discard it in medical waste containers.
- Wash your hands with soap and water after you take off your personal protective equipment.
- Discard all used disposable personal protective equipment in a medical waste container, and seal it tightly. Follow the waste disposal procedures.
- ➤ [Appendix 12] Safety management and special measures for COVID19 related waste ('20.3.2.)
 - * Reusable goggles can be reused after disinfecting them according to the manufacturer's instructions
- If you have fever or respiratory symptoms within 14 days of cleaning and disinfection, report to the Public Health Center.
- **(Criteria for resuming use)** Consider the type and the characteristics of the disinfectant used and the purpose of the space.
 - · The virus is killed after disinfection, but the criteria for resuming use of the space will depend on the characteristics of each disinfectant because the characteristics widely vary. As such, it is necessary to individually consider the safety precautions of each disinfectant.
 - · When using sodium hypochlorite (over 1,000ppm), thoroughly ventilate the space before use. (Use of the space is prohibited until the day after disinfection; we recommend that the space is sufficiently ventilated before use.)

Туре	Begin disinfection	Criteria for resume use	Note
Community and/or public facility - areas used by the patient (Area)	· <u>Upon confirmation</u> that a patient has used an area in the facility	· Resume use of the space (area) based on the characteristics of the disinfectant	For sodium hypochlorite, high concentration dilution is used. As such, recommend resuming use of space (area) after sufficient ventilation for a day or more after disinfection (considering

			odor and possible safety risk, etc)
Healthcare facility (Hospital)	: Immediately implement for environmental surfaces contaminated with blood, bodily fluids, secretions and feces. · Around the isolated patient rooms (patient rooms of the confirmed patients), disinfect at least once every day. Perform frequent disinfection for surfaces with frequent hand contact · Disinfect room after patient discharge	: After disinfection, recommend resuming use after ventilating with more than 6 times air changes per hour for at least 2 hours	• Refer to "Prevention and Management of Coronavirus Disease 2019 (for hospital-level healthcare facilities)" ('20 .2.11.)
Healthcare facility (Clinic level)	: After a COVID-19 suspected patient visits		• Refer to "Prevention and Management of Coronavirus Disease 2019 (for hospital-level healthcare facilities)" ('20 .2.11)
Healthcare facility (Emergency room)	· After a confirmed COVID-19 patient visits the emergency room	· After disinfection, recommend resuming use after ventilating with more than 6-12 times air changes per hour for at least 4 hours	"Coronavirus Disease 2019 Guidance for practices in healthcare facilities" ('20 .2.22.)

5. Disinfection Measures

- o (Legal basis) Infectious Disease Control and Prevention Act
 - Article 47 (preventative measures for infectious disease epidemic)
 - · No. 5 ordering disinfection or other necessary measures of places contaminated with infectious disease pathogens
 - Article 48 (disinfection measures of the contaminated places)
 - Article 49 (prevention measures of infectious diseases)
 - · Article 8 disinfection of facilities or places relevant to public health
 - · No. 13 ordering disinfection of or other necessary measures of contaminated buildings
- (Disinfection order) The Minister of Health and Welfare, mayor, governor, county head,
 Public Health Center issues notification of disinfection order to management/operator of the contaminated facilities.
 - * Specify the facility name, disinfection scope, and disinfection date in detail
 - > [Form 11] Notice of isolation/ quarantine form

- (Disinfection fulfillment) The manager/operator of the facility that has been ordered disinfection must perform disinfection following the Infectious Disease Prevention Law [Attachment 6, Disinfection Method], No 5. Disinfection Using Disinfectants.
 - * The director of the Public Health Center can instruct and supervise disinfection if necessary.
 - (Reporting of disinfection plan and results) The personnel doing disinfection will create a
 plan before disinfection and report the results after disinfection to the manager/operator of
 the facility that was ordered disinfection.
 - * The personnel who did disinfection will issue [Form 11] Certificate of Disinfection to the manager/operator of the disinfected facility.
- If the director of the public health center judges that a second disinfection is necessary (for reasons such as the first disinfection did not suffice the disinfection standards) by checking the disinfection certificate, etc., they can order the space to be disinfected again according to the disinfection standards.
 - > [Form 12] Certificate of Disinfection
- ♦ For details on disinfection method and list of disinfectants in case of a confirmed patient, refer to: [Disinfection guide for congregate or public facilities used by a COVID-19 patient (2-1 Edition)]

<Forms>

1. Infectious Disease Reporting Form —————————————————————68
2. Infectious Disease Mortality Report (Post-mortem inspection)
3. Inpatient Treatment Notice 75
4. Notice of Isolation/Quarantine (Korean/English)77
5. COVID-19 Basic Epidemiological Investigation (Confirmed Cases)78
6. COVID-19 Case Management Report (Confirmed Cases)
7. Self-Isolated/Quarantined Cases Monitoring Log83
8. Patient Health Monitoring Log 84
9. COVID-19 Close Contact Surveillance Form 85
10. Daily Status Report of Epidemiological Investigation by Municipal COVID-19 Immediate Response Task Force (Example)86
11. Epidemic Control Measure Form 88
12. Certificate of Disinfection 89
13. Specimen Laboratory Test Request Form90

Form 1. Infectious Disease Reporting Form

■ Enforcement Regulations of Infectious Disease Control and Prevention Act [Attachment No. 1-3 Form] < Revised Nov. 22, 2019>

Infectious Disease Reporting Form

❖ Please read the instructions on the back regarding how to fill out and submit this report. In [], check (√) where applicable.

Recipient:	[] Director of the Korea Centers for Disease C	Control and Prevention	(Front)
	[] Director of Public Health Center	er	
[Patient's	Personal Information]		
Name:		Resident (Alien) Registration Number:	
Guardian (If the pat	's name: tient is 19 years old or younger)	Sex: [] Male [] Female	
Phone nu	ımber:	Cell phone number:	
Address:			
[] Addres	ss unknown [] Identity unknown	Occupation:	
[List of Inf	fectious Diseases]		
	[] Ebola Hemorrhagic Fever (Ebola)	[] Francisella Tularensis	
Class 1	[] Marburg Hemorrhagic Fever (Marburg)	[] Emerging Infectious Diseases (Signs and Symptoms:)
	[] Lassa Fever	[] Severe Acute Respiratory Syndrome (SARS)	
	[] Crimean-Congo Hemorrhagic Fever	[] Middle East Respiratory Syndrome (MERS)	
	[] South American Hemorrhagic Fever	[] Avian Influenza	
	[] Rift Valley Fever	[] H1N1 influenza	
	[] Smallpox	[] Diphtheria	
	[] Plague		
	[] Anthrax		
	[] Botulism		
	[] Chickenpox	[] Rubella ([] congenital rubella [] acquired rubella)	
	[] Measles	[] Polio	
	[] Cholera	[] Meningococcal disease	
	[] Typhoid	[] Haemophilus influenzae Type B	
	[] Paratyphoid Fever	[] Pneumococcal disease	
Class 2	[] Shigellosis	[] Hansen's disease/ Leprosy	
	[] Enterohemorrhagic <i>E. coli</i> infections (EHE	C) [] Scarlet Fever	
	[] Hepatitis A	[] Vancomycin-Resistant Staphylococcus Aureus (VRS) infection	A)
	[] Pertussis	[] Carbapenem-Resistant Enterobacteriaceae (CRE) int	fection
	[] Mumps		

	[] Tetanus			[] Hemo	rhagic Fever with Renal Syndrome ((HFRS, Hantavirus)
	[] Hepatitis B				feldt-Jakob disease (CJD) and varia dt-Jakob disease (vCJD)	nt
	[] Japanese En	cephalitis		[] Yellow	fever	
	[] Hepatitis C			[] Dengu	e fever	
	[] Malaria			[]Q feve	r	
	[] Legionellosis			[] West I	Nile fever	
Class 3	[] Vibriosis			[] Lyme	disease	
	[] Rickettsial dis	seases		[] Tick-bo	rne encephalitis	
	[] Murine typhus	s (Rickettsia typl	(וֹר	[] Melioid	osis	
	[] Tsutsugamus	shi Disease		[] Chikun	gunya fever	
	[] Leptospirosis			[] Severe	Fever with Thrombocytopenia Synd	rome (SFTS)
	[] Brucellosis			[] Zika vii	rus infection	
	[] Rabies					
Infactious	Disease Onset	Information1				
	iset:	_	Date of Diag	nosis:	Date of Report	:
	Test Result:		Negative [] Test			
Hospitaliza	ation Status:	[] Outpatient [] Hospitalized [] Other		ı
Classificati Status, etc	on of Patient	[]Patient[]P	atient Suspected	d of an Inf	ectious Disease [] Pathogen Carrier	[] Other
Note (Othe	er relevant informa	ation):				
Alive or De	eceased:	[] Alive [] Dec	eased			
[Reporting	g Medical Institu	tion, etc.]				
	e Institution on Number:				Name of Health Care Institution:	
Address:	on rambon.				Phone Number:	
Name of th			(Signature or	seal)	Name of the Head of the Reporting	Institution:
Public He	alth Center Repo	ort Information]				
Nationality	(For foreigners or	ոly)։				
Patient's institution name:			Pat	ent's address:		
Presumed	infected area:	[] Domestic				
		[] Overseas (Country:	/ Length of stay	/: ~ / Da	ate of Entry: Year Month Da	ıy <u></u>)
					210mm x 207mm [Conord paper	COa / m² (Dooyolod)]

(Back)

How to report

- 1. For Class 1 infectious disease novel infectious syndrome, immediately notify the director of the Korea Centers for Disease Control and Prevention or a director of the local public health center, verbally, by means of telephone, etc. Subsequently, a written report must be submitted to the director of the Korea Centers for Disease Control and Prevention or a director of the local public health center. For Class 2 or 3 infectious diseases, a written report must be submitted to the director of the Korea Centers for Disease Control and Prevention or a director of the local public health center within 24 hours. However, if patients with previously reported infectious diseases have a change in their diagnostic test result or classification, and/or if they have been identified as not patients, such change must be updated and reported or notified to the local public health center.
- 2. Depending on the infectious disease, additional information may be requested to determine the patient's condition and the cause of the infectious disease.
- 3. If the patient expires prior to reporting infection, complete and submit both Report of Infectious Disease Outbreak and Report of Death (Autopsy) of Infected Patients. If the patient expires after reporting infection, complete and submit only the Report of Death (Autopsy) of Infected Patients.
- 4. Infection of, and death due to, Tuberculosis (among Class 2 infectious diseases) and AIDS (among Class 3 infectious diseases) must be reported separately as stipulated in the "Tuberculosis Prevention Act" and the "Prevention of Acquired Immunodeficiency Act," respectively.
- 5. In the event of a Class 4 infectious disease (an infectious disease subject to sample surveillance), a health care institution designated as a sample surveillance medical institution or a director of other institutions or organizations must submit a separate form determined by the director of the Korea Centers for Disease Control and Prevention within 7 days.
- 6. Report through fax or information system [Infectious Diseases Web Report in the Health and Disease Integrated Management System (http://is.cdc.go.kr)].
- 7. A public health center that has received a report from a medical institution and others under its jurisdiction must notify the information to the patient's local public health center.

How to fill out the report

[Recipient] Check $(\sqrt{})$ the applicable recipient, and if the recipient is the director of a public health center, write the jurisdiction of the public health center in the blank.

[Patient's Personal Information]

- (1) Name: If the patient is 19 years of age or younger, write down the patient's name and the name of their legal guardian. (Foreigners may write their name in English.)
- (2) Resident (Alien) Registration Number: Write 13 digits of the patient's resident registration number. (For foreigners, write the alien registration number.)

[Name of the Infectious Disease] Check ($\sqrt{}$) the relevant infectious disease, and in case of novel infectious syndrome among Class 1 infectious diseases, write the signs and symptoms in parentheses.

[Infectious Disease Onset Information]

- (1) Date of Onset: Enter the date on which the patient's symptoms began. (Since a pathogen carrier does not have an onset date, write "0000-00-00").
- (2) Date of Diagnosis: Enter the date when the diagnosis of the infectious disease was first diagnosed at the reporting medical institution.

- (3) Report Date: Enter the date of the first report from the reporting medical institution to the local public health center. (If you are reporting by fax, enter the date you are sending the fax. If you are reporting through the information system, enter the information system input date.)
- (4) Confirmation Test Result: Check ($\sqrt{}$) where applicable, referring to the "Diagnostic Criteria for Infectious Diseases" announced by the Director of the Korea Centers for Disease Control and Prevention.
- (5) Classification of Patient Status, etc.: If the test results indicate and confirm that the patient is not a carrier of the relevant infectious disease, etc., check ($\sqrt{}$) "Other."
- (6) Alive or Deceased: If the patient is deceased, check ($\sqrt{}$) "Deceased," and also complete and submit the [Attachment No. 1-4 Form] "Report of Death (Autopsy) of Infected Patients, etc."

[Reporting Medical Institution, etc.]

- (1) If the reporting individual belongs to a medical institution, fill out the health care institution information, the name of the doctor who diagnosed the infectious disease, and the name of the head of the medical institution. If the reporting individual does not belong to a medical institution, write the address and telephone number of the institution to which the reporting individual belongs, the name of the doctor who diagnosed the infectious disease, and the name of the head of the institution to which the reporting individual belongs.
- (2) If you are using the information system, you can select the applicable institution by using the "Search Health Care Institution" button. Then, the health care institution identification number, telephone number, address, and the name of the head of the reporting institution will be automatically filled out.

[Public Health Center Report Information]

- (1) Patient's institution name and address: Enter the name and address of the institution to which the patient belongs, including the workplace (business place), school (including daycare center and kindergarten), military units, etc.
- (2) Nationality: For foreigners only, fill in the patient's nationality.
- (3) Presumed infected area: If it is suspected that the patient was infected while staying abroad, check ($\sqrt{}$) "Overseas," and write the name of the country (if the patient had stayed in multiple countries, write the name of the country in which the patient suspects he/she may have been infected), the length of the stay and the date of entry.

Form 2. Report of Death (Post-mortem Inspection) Relating to Infectious Disease

■ Enforcement Regulations of Infectious Disease Control and Prevention Act [Attachment No. 1-4 Form] <Revised Nov. 22, 2019> You may report through Health and Disease Integrated Management System (http://is.cdc.go.kr)

Report of Death (Post-mortem Inspection) Relating to Infectious Disease

		g now to hii out and submit this report. Mark vin [] wh	ere applicable
•	[] Director of the Korea Centers for Disease Co		(Front)
	[] Director of Public Health Cente Personal Information]		
Name:		Resident (Alien) Registration Number:	
		, , <u>, , , , , , , , , , , , , , , , , </u>	
	ent is 19 years of age or younger, the seir guardian:)	Sex: [] Male [] Female	
Phone nu	mber:	Cell phone number:	
Address:			
[] Address	s unknown [] Identity unknown	Occupation:	
[List of Int	fectious Diseases]		
	[] Ebola Hemorrhagic fever (Ebola)	[] Francisella tularensis	
	[] Marburg Hemorrhagic fever (Marburg)	[] Emerging infectious diseases (signs and symptoms:)
	[] Lassa Fever	[] Severe Acute Respiratory Syndrome (SARS)	
	[] Crimean-Congo Hemorrhagic Fever	[] Middle East Respiratory Syndrome (MERS)	
Class 1	[] South American hemorrhagic fever	[] Avian Influenza	
	[] Rift Valley Fever	[] H1N1 influenza	
	[] Smallpox	[] Diphtheria	
	[] Plague		
	[] Anthrax		
	[] Botulism		
	[] Chickenpox	[] Rubella ([] congenital rubella [] acquired rubell	a)
	[] Measles	[] Polio	
	[] Cholera	[] Meningococcal disease	
	[] Typhoid	[] Haemophilus influenzae Type B	
	[] Paratyphoid fever	[] Pneumococcal disease	
Class 2	[] Shigellosis	[] Hansen's disease/ Leprosy	
	[] Enterohemorrhagic E. coli infections (EHE	C) [] Scarlet Fever	
	[] Hepatitis A	[] Vancomycin-resistant <i>Staphylococcus aureus</i> ('infection	VRSA)
	[] Pertussis	[] Carbapenem-resistant Enterobacteriaceae (CR	E) infection

	 [] Mumps						
	[] Tetanus		[] Hemorrhagic Fever with Renal Syndrome (HFRS, Hantav	irus)			
	[] Hepatitis B		[] Creutzfeldt-Jakob disease (CJD) and variant Creutzfeldt-Jakob disease (vCJD)				
	[] Japanese Encephalitis		[] Yellow fever				
	[] Hepatitis C		[] Dengue fever				
	[] Malaria		[] Q fever				
	[] Legionellosis		[] West Nile fever				
Class 3	[] Vibriosis		[] Lyme disease				
	[] Rickettsial diseases		[] Tick-borne encephalitis				
	[] Murine typhus (<i>Rickettsia typh</i> i)		[] Melioidosis				
	[] Tsutsugamushi Disease		[] Chikungunya fever				
	[] Leptospirosis		[] Severe Fever with Thrombocytopenia Syndrome (SFTS)				
	[] Brucellosis		[] Zika virus infection				
	[] Rabies						
[Cause of I	Death] ❖ In (B) (C) (D), write or	nly those with a cle	ear direct and medical causal relationship with (A)				
(A) Cause death	directly leading to						
(B) Cause	of (A)	In	terval between onset and				
(C) Cause	of (B)		death term				
(D) Cause	e of (C)						
Other phys	sical conditions other than the c	ause of death fror	m (A) to (D)				
Main findir	ngs of surgery:	Da	ate of expiration:				
Key finding	gs of autopsy (or postmortem in	spection):					
[Reporting	medical institution, etc.]						
Medical in	stitution number		Medical institution name				
Address			Phone number				
Diagnostic doctor's name (Signature or s		(Signature or sea	al) Report head				

210mm × 297mm [white paper (80g / m²) or heavy paper (80g / m²)]

(Back)

How to report

- 1. For Class 1 infectious diseases, immediately notify the director of the Korea Centers for Disease Control and Prevention or a director of the local public health center, verbally, by means of telephone, etc. Subsequently, a written report must be submitted to the director of the Korea Centers for Disease Control and Prevention or a director of the local public health center. For Class 2 or 3 infectious diseases, a written report must be submitted to the director of the Korea Centers for Disease Control and Prevention or a director of the local public health center within 24 hours. However, if patients with previously reported infectious diseases have a change in their diagnostic test result or classification, and/or if they have been identified as not patients, such change must be updated and reported or notified to the local public health center.
- 2. Depending on the infectious disease, additional information may be requested to determine the patient's condition and the cause of the infectious disease.
- 3. Infection of, and death due to, Tuberculosis (among Class 2 infectious diseases) and AIDS (among Class 3 infectious diseases) must be reported separately as stipulated in the "Tuberculosis Prevention Act" and the "Prevention of Acquired Immunodeficiency Act," respectively.
- 4. <u>If the patient expires prior to reporting infection, complete and submit both Report of Infectious Disease</u>

 Outbreak and Report of Death (Autopsy) of Infected Patients. If the patient expires after reporting infection, complete and submit only the Report of Death (Autopsy) of Infected Patients.

How to fill out the report

[Recipient] Mark $\sqrt{\ }$ on the applicable recipient and if the recipient is the director of the local health center, write down the jurisdiction of the health center in the blank.

[Patient's personal information]

- (1) Name: If the patient is 19 or younger, write down the name of the patient and their guardian (for foreigners, you may write in English).
- (2) Resident (alien) registration number: Write down equivalent resident registration number that your country uses (for foreigners, enter the alien registration number).
- ❖ For the case of reporting death through **Health and Disease Integrated Management System** (http://is.cdc.go.kr), the section on patient's personal information in the **Report of the Outbreak of Infection** will be filled out automatically.

[List of Infectious diseases] Corresponding infectious disease is marked with $\sqrt{\ }$, and for **Novel infectious** disease syndrome under **Class 1** infectious disease, please fill out the symptoms and sign as indicated in parentheses.

[Reporting Medical Institution, etc.]

- (1) If the reporting individual belongs to a medical institution, fill out the health care institution information, the name of the doctor who diagnosed the infectious disease, and the name of the head of the medical institution. If the reporting individual does not belong to a medical institution, write the address and telephone number of the institution to which the reporting individual belongs, the name of the doctor who diagnosed the infectious disease, and the name of the head of the institution to which the reporting individual belongs.
- (2) If you are using the information system, you can select the applicable institution by using the "Search Health Care Institution" button. Then, the health care institution identification number, telephone number, address, and the name of the head of the reporting institution will be automatically filled out.

Form 3. Inpatient Treatment Notice

■ Enforcement Regulations of Infectious Disease Control and Prevention Act [Attachment No. 22 Form]

Inpatient Treatment Notice								
Name		Resident Registration Number						
Inpatient treatment	Date of Inpatien	t Admission:						
пеаппепп	Inpatient Treatment Period:							
	Inpatient Treatment	[] Hospital [] Home	[] Residential Facility					
	Location	Address:						
_	-	you should be admitted and treated inpease Control and Prevention Act.	patient in accordance with Article 41					
❖ If you do not comply with this notice, you will be fined up to \$3,000 in accordance with Article 80-4 of the Infectious Disease Control and Prevention Act.								
(MM/DD/YYYY)								
Head of the Local Government / Ward or Head of Medical Institution								

210mm × 297mm [General paper 60g / m² (Recycled)]

Form 4. Notice of Isolation/ Quarantine

Noti	ce of Isola	tion/ Quarantine (Kore	an)					
Name		Date of Birth						
Quarantine Type	Duration	Effective from/ to/						
□ Home/Self-quarantine□ Facility□ Hospital	Location	[] Residence (including home) [] Other facilities						
⊔ поѕрітаі		Address						
pathogen" in accordance with person in contact with an infe	n Article 49-1-14 o ectious patient and	s "a person suspected of being infecte f the 「Infectious Disease Control and I at risk of infection or spread of diseas subject to mandatory quarantine.	d Prevention Act」 or as "a					
If you do not comply with the Infectious Disease Control		I be fined up to \$3,000 in accordance Act.	with Article 80.4 or 80.7 of					
// (MM/DD/YYYY)								
Director of Public Health Center								

Notice of Isolation/ Quarantine (English)							
Name		Date of Birth	/				
Quarantine Type	Duration	Effective from//	_to//				
□ Home/Self-quarantine□ Facility□ Hospital	Location	[] Residence (including home) [] Other facilities					
		Address					
The government of the Republic of Korea notifies you that you are to be self-quarantined for a requested period of time according to Article 49.1.14 or 41.3.2 of the Infectious Disease Control and Prevention Act. If you do not comply with this notice, you will be fined up to \$3,000 in accordance with Article 80.4 or 80.7 of the Infectious Disease Control and Prevention Act.							
// (MM/DD/YYYY)							
Mayor · Governor of metropolitan cities and provinces							
Or							
Mayor ⋅ Governor ⋅ Head of district office [gu] or							
Head of medical institution							

Form 5: COVID-19 Basic Epidemiology Survey (Confirmed Case)

- ❖ If the patient on this survey was previously reported as a suspected patient and has tested positive, please make sure to re-classify as a "confirmed patient" on the online disease reporting tool before continuing on with this survey
- ❖ Please report to: Infectious Disease Management System (is.cdc.go.kr) Infectious Disease Management Supporting Documents Epidemiological Investigation New Infectious Disease Basic Epidemiology Survey (vs2)

Investigator information Investigation facility		1		Contact		(Office)			Reporting		
				Numb	er	(Mobile)		agency (N of public h facility or			
	Investigator name			Invest on Da	-	/_ (MM/DD/		_	medical institution))	
Test (given by the K confirmation number		(CDC)	DC) Testing facilit					Quar type a locati		□ Ho □ Fa □ Ho	-
Date of test confirmation			Date of tes performed					Quarantine start date		// (MM/DD/YYYY)	
1. Patient Inf	formation (Ch	eck the	box or write	e down	the r	esponse)					
1.1 Name					1.2 Resident Registration Number		_		1.3 Sex	(Male Female
1.4 Nationality		Citizen Foreigner (country name:)		1.5 /	Addre	ss					
1.6 Contact Patient phone number		(con	npany	pation name,							
	Emergency Contact			med	ool na lical ir ne, etc	stitution					
1.8 For medical workers		medica	•			□ Other (Rad paramedic, d		gy tech	nnologist, n	ursing	assistant,

3.3 Clustered outbreaks

o Yes

□ School: ____ □ Other: ____

□ Family member (or partner)□ Medical institution: ____□ Place of worship: ____

□ Nursing homes or psychiatric facilities: ____

2. Symptoms and Underlying Illnesses (Check the box or write down your response)									
2.1 Symptoms (From 14 days prior to the test confirmation up to now)	 Yes (fill out 2.2, 2.3) None	2.2 Date of symptom onset	// (MM/DD/YYYY)						
2.3 Initial symptoms	□ Fever (including subjective complaints)	□ Respira	atory symptoms	toms			□ Pneumonia		
	○ Yes (temperature:) ○ No		~	 Yes ➤ □ Muscle pain □ Chills □ Other: No 		∘ Yes ∘ No			
2.4 Pre-existing conditions	 Yes (please be spe No	Yes (please be specific:) No			∘ Yes (_ ∘ No	1	weeks)		
2.6 Treatment status (at the time of confirmation)									
3. Suspected Source down the response)	of Infection (From	14 days prid	or to the symptor	m onset up to nov	w; check th	e box or	write		
3.1 International travel	o Yes (Country name: _	○ Yes (Country name: , Entry date:/ / (MM/DD/YYYY))							
3.2 Contact with a person who tested positive	 Yes □ Family member - Name: - Patient confirm □ Persons other the result of the patient confirm □ Patient confirm □ Date of last confirm 	ation numbenan family r	er: nembers (or part er:				∘ No		

 $\circ \ \text{No}$

3.4 Other remarks					
	es - medical institutions or other facilities, etc. (From 14 days prior to the box or write down the response)	the the			
 Yes (Institution / facility name: □ Currently hospitalized (admission date:// (MM/DD/YYYY)) □ Discharged (discharge date:// (MM/DD/YYYY)) 					
5. Family members, partners, and other persons with whom contact was made (any person with whom the contact was made from one day prior to the symptom onset up to now; check the box or write down the response)					
5.1 Family members or partners	○ Yes □ Number of people:	o No			
5.2 Other facilities (places of worsh nursing homes, psychiatric facilities schools, institutions, etc.)		o No			
5.3 Medical facilities	○ Yes □ Name of medical facility: □ Number of people:	o No			

Form 6. COVID-19 Case Management Report (Confirmed Case)

- ❖ Tips: Check and register major progress / results such as "hospital discharge," "quarantine release," and "death" of confirmed patients
- ❖ Online registration portal: Report through the Integrated System for Disease Control/Public Health (<u>is.cdc.go.kr</u>) Infectious disease management integrated information support Patient management Patient information management

Investigator	lumin dinting			Camta	-4	(Office)			Danartina		
Investigator information	Jurisdiction Investigation facility			Conta Numb	` ′				Reporting agency (Name of public health facility or		
	Investigator name			Invest on Da	-	//_ (MM/DD/YY		medical institution)		1	
Test confirmation number	onfirmation		DC) Testing facility					Quar type locat		□ Ho □ Fa □ Ho	
Date of test confirmation			Date of tes	t	// (MM/DD/YYYY)		· ′)	Quarantine start date		//_ (MM/DD/YYYY)	
1. Patient Inf	ormation (Ch	eck the	box or write	e down	the r	esponse)					
1.1 Name					1.2 Resident Registration Number		-		1.3 Sex	(Male Female
1.4 Nationality		Citizen Foreigner (country name:)		1.5 /	Addre	ss					
1.6 Contact Patient phone number		(con		name,							
	Emergency Contact			med	ool na lical ir ne, etc	stitution					
1.8 For medical workers		medica	-			□ Other (Rad paramedic, d		gy tecl	hnologist, n	ursing	assistant,

2. Report Status					
2.1 Patient report	∘ Reported	○ Not Reported			
2.2 Basic epidemiological surveillance	∘ Reported	○ Not Reported			

3. Patient Status (Record any major progress of patient care until the end of the patient care)						
3.1 Patient status (Choose one)	○ Currently hospitalized (////) (MM/DD/YYYY) □ Name of medical facility:) ○ Discharged from the hospital (//) ○ Death (//)	○ None				
3.2 Treatment status (Status at the time of report)	○ Routine treatment ○ Oxygen treatment (nasal cannulas, face masks) ○ Mechanical ventilation ○ ECMO ○ Death ○ Under investigation ○ Other ()	∘ None				

4. Isolation/ Quarantine status (Record any major progress until the end of the patient care)					
4.1 Quarantine	 Under quarantine (□ Self-quarantine, □ Quarantine in designated facilities, □ Hospital isolation) //// (MM/DD/YYYY), □ Name of isolation place: Not under quarantine Discharged from quarantine (// (MM/DD/YYYY)) 	∘ None			

❖ If the reporting patient is deceased, report the patient's medical record and death certificate.

Form 7. Self-Isolated/Quarantined Patient Monitoring Log

Current Status	Discharged after proper health education	Transferred to xx medical institution			
Symptoms during quarantine period		Fever, sore throat (Jan 1, 2019)			
Comments	Discharged from xx hospital	No symptoms			
Severity Classification					
Address					
Date of Quarantine Release	Jan 20				
Date of Self- Quarantine	Jan 10				
Date of Birth					
Sex	Male				
Name	Brian Jones				
Š					

Form 8. Patient Health Monitoring Log

Partial Part	out to the	Clinical symptoms	SL	Day 1	Day 2	Day 3	Day 4	Day 5	-	Day 10	Day 11	Day 12	Day 13		Day 19	Day 20	Day 21
Highly Figures of Free Highly Figures of Fre	ratient name			Date:	Date:	Date:	Date:	Date:	855 88	Date:	Date:	Date:	Date:	_	Date:	Date:	Date:
Fig. 1 Sign		H	AM	36.5°C	36.5°C	36.5°C	36.5°C	36.5°C		36.5°C	36.5°C	36.5°C	36.5°C	е .	36.5°C	36.5°C	36.5°C
2. C finicial Symptoms of Laceh A Cough A Cough A Cough A Cough B Figure A Cough A Co		1.body lemperature	PM	38°C	6.5°C	36.5°C	36.5°C	36.5°C		36.5°C	36.5°C	36.5°C	36.5°C	3	36.5°C	36.5°C	36.5°C
H. F. Cough A. Cough A. Cough B. F. Signer A. Cough B. F. Signer A. Cough B. F. Signer B. C. Shortness of breash and A. C. Shortness of B. Shortness		2. Clinical Symptor	ms														
B. Falghan	(Example)	A. Cough		`	`	/					,		,				
AM	Name:	B. Fatigue					,	,							`	`	`
MA M		C. Shortness of bre	ath	`	`	,											
AM AM PM		D. Sore throat			`				-		,						
		E. Others				Diarrhea											
		T. do d	AM														
		Loudy Temperature	PM														
		2. Clinical Symptoms															
		A. Cough															
		B. Sore throat															
		C. Shortness of breath															
		D. Sputum production								,							
		E. Others															
		T. John T.	AM														
2. Clinical Symptoms A. Cough P. Sore throat P. Shortness of breath C. Shortness of breath D. Sputum production P. Shottlers		Dody remperature	PM														
A. Cough B. Sore throat C. Shortness of breath C. Shortness of breath<		2. Clinical Symptoms															
B. Sore throat C. Shortness of breath C. Shortness of breath C. Shottness of breath		A. Cough															
C. Shortness of breath D. Sputum production E. Others		B. Sore throat															
D. Sputum production E. Others		C. Shortness of breath															
E. Others		D. Sputum production															
		E. Others															

Form 9. COVID-19 Close Contact Tracing Form

Y.: Yes, N: No	>	z	z	z
YYYY	2015 0630	2015 0630	2015 0630	2015 0630
Company or school name in text	Hospital	University	Company	Unemploye d
Number	021234	021234	021234 1234	021234
Number	01012341 234	01012341 234	01012341 234	01012341
Type in the country of origin if not from Korea			China	
Y: Korean, N: Foreigner	*	,	z	,
1: No quarantine 2: Quarantine released 3: Self-quarantine 4: Hospital quarantine 5: Cohort quarantine	3[Self- quarantine]	3[Self- quarantine]	3[Self- quarantine]	3[Self- quarantine]
01: Healthcare providers including doctors, nurses and physician assistants 02: Other hospital employees 03: Patient 04: Family 05: Friends 06: Others	1[Healthcare provider]	4[Family]	2[Other Hospital employee]	111-11 4[Family] 3[Self- Y 01012341 021234 Unemploye 2015 N 234 1234 d 0630 N
Street, Unit	111-11	111-11	111-11	
State, City	Seoul Mapo Sangsoo Dong	Seoul Mapo Sangsoo Dong	Seoul Mapo Sangsoo Dong	Seoul Mapo Sangsoo Dong
1:Male 2: Female	1[Male]	1[Male]	1[Male]	4 Tom 2001 1[Male] Seoul Mapo Seoul Dong
YYYY	1971	1971	2001	2001
Full	John Smith	John Doe	Nick Doe	Tom Brenner
Formatting Instruction	1	7	ε	4
	Full YYYY 1:Male State, Unit Other hospital employees Other hospital Other hospital Others of Others of Other hospital Others of Ot	Full YYYY 1:Male State, Street, assistants 02: Serul MMDD 2: Female City Unit Gothers and Unarantine employees 4: Hospital John 1971 1[Male] Serul Mapo Dong 111-11 Provided] Provided Gothers Smith O101 1971 1[Male] Serul Provided] The provided Gothers Smith O101 1971 1 The provided Gothers Got	Full YYYY 1:Male State, Officers of Conjugation and Sample Smith Officers of Conjugation and Sample Smith Officers of Conjugation and Sample Smith Officers of Conjugation and Sample Officers	Full YYYY 1.Male State City Unit 100 11 11 11 11 11 11

* Fill out and complete the above close contact tracing form in excel and upload the file into the KCDC's comprehensive public health management system (Infectious Disease Control Information → Patient Control → Close Contacts Tracing → upload).
* Resident registration number of the confirmed patient, test confirmation number as well as the location of close contact should be included in the "Public health center opinion" section.

Form 10. Daily Status Report of Epidemiologic Investigation by Municipal COVID-19 Immediate Response Task Force (Sample)

- ♦ Disclaimer: Any and all Municipal COVID-19 Immediate Response Task Force's activities (e.g. cases in group facilities and/or medical institutions) must be reported daily via this form
- ♦ Instructions: Fill out the form and send it to the Korea Centers for Disease Control and Prevention (Central Defense Response Headquarters)'s email at kcdceid@korea.kr.

<u>Daily Status Report of Epidemiologic Investigation by Municipal</u> <u>COVID-19 Immediate Response Task Force</u>

<[Name of municipality]'s Municipal COVID-19 Immediate Response Task Force, __/__/.2020 (Sat)>

Management Status

- Patient
- Close Contacts: Secure a list of Close Contacts*, Self / Facility / Hospital Isolation in their body of jurisdiction (district/county/city).
 - * (Distribution and size of Close Contacts) Ex. As of [time] on [date], Close Contacts total [number] the patients' spouses, [number] passengers aboard the aircraft, [number] flight attendants, [number] quarantine officers, [number] staff at [Hospital Name] ([number] doctors, [number] nurses)
 - Sending Close Contacts List and Form: List of close contacts by local governments, Initial Investigation of Close Contacts and Daily Monitoring Form, Monitoring Method Guide
 - * Report to [agency] by 17:00 after monitoring patients' status daily at [no.] AM and [no.] PM

Active Measures

- On-site Response: Dispatch to the [Hospital Name] in [name of municipality], conduct epidemiological investigation
 - * Dispatched [no.] of Municipal COVID-19 Immediate Response Task Force and [list all responses taken here]
 - Conducted patient interviews to determine overseas travel/ activity and activity after entry [TIMESTAMP]
 - Mapped out patients' path of activity from point of entry and confirm the range of possible close contacts
 - Re-collected samples (from upper and lower respiratory tract), requested for re-testing [TIMESTAMP] → Confirmed positive re-testing results from the corresponding Research Institute of Public Health and Environment
- Measures: Secure a list of Close Contacts*, Self / Facility / Hospital Isolation in their body of jurisdiction (district/county/city).
 - * (Distribution and size of Close Contacts) Ex. As of [time] on [date], Close Contacts total [number] the patients' spouses, [number] passengers aboard the aircraft, [number] flight attendants, [number] quarantine officers, [number] staff at [Hospital Name] ([number] doctors, [number] nurses)
 - Sending Close Contacts List and Form: List of Close Contacts by local governments, Initial Investigation of Close Contacts and Daily Monitoring Form, Monitoring Method Guide

- * Report to [agency] by 17:00 after monitoring patients' status daily at [no.] AM and [no.] PM
- Press Briefing: Distribute reference materials for press release, briefings held at [name of venue]

Future plans

 Municipal COVID-19 Immediate Response Task Force to return to the corresponding municipality; identify, monitor, and manage close contacts via district/county/city public health centers and confirm follow-up measures

Form 11. Epidemic Control Measures Form

Temporary Closure ☐ Restricted Access ☐ Limited Movement ☐							
Sus	spension o	f Medical	Institute □	Disi	nfect	ion 🗆 Ord	der
Target Casility	Name						
Target Facility	Address						
Owner	Name			Date o	of Birth		
(Manager)	Address			Phone	Numbe	er	
			Order Category				Effective Period
Ondo.	Temporary closure	Restricted access	Limited movement	Suspe of me instit	dical	Disinfection	From :
Order Instructions							_//2020 To : //2020
Order Target	Range	Er	tire facility		(Part of faci If so, describe rang	
The standard for resuming operation of individual facilities can be adjusted according to the characteristic(s) of each type of disinfectant and the purpose of the facility after the space(area) the patient used has been disinfected. • The virus will be killed off completely after disinfection; however, as the characteristic for each disinfectant varies, it is necessary to consider separate precautions for each disinfectant product. A decision on the time for resuming operation should not be made across-the-board. • When sodium hypochlorite (1,000ppm or higher) is used for disinfection, sufficient ventilation is required before reusing the space. (It is recommended to restrict the use of the space until a day after disinfection and with sufficient ventilation.)							
In accordance wi Restricted Acces Temporary Closu declared as above	s, Limited Mover ure, Restricted Ac	nent), No. 2 (Sus	pension of Medic	cal Institu	te), No.	5 (Disinfection),	Order of
		-	// 2020				
	[Name H	ere], Dired (No sig	ctor of Pu			n Center	
			Notes				
In case of violat Institution, Disinf can be fined up to	ection in accorda	nce with Infect	tious Disease Co	ntrol and	Preven	tion Act」 Article	

Form 12. Certificate of Disinfection

■ Enforcement Regulation on the Prevention and Management of Infectious Diseases [Attachment Form No. 28]

Number:		
	Certificate of D	isinfection
Target Facility	Company Name:	Coverage Area (Volume): m²(m²)
	Address:	
	Administrator/Manager Confirmation	Position:
		Name: Signature:
Disinfection Period	From to	
Disinfection	Type:	
Activity	Details of chemicals used:	
-	fection was carried out as above in accorda rention Act」 and the Enforcement Rule Artic	nce with Article 54(1) of the 「Infectious Disease cle 40(2) of the same Act.
		Day/Month/Year://
Ado	ne of Disinfected Company: dress: ne(Representative):	Signature

Form 13. Specimen Test Request Form (Sample)

- ❖ The following is a form for cases referred to the Korea Centers for Disease Control and Prevention, and must be filled out appropriately and submitted by an applicable health and environment researcher when requesting a test.
- Request Guideline for Testing by the Korea Centers for Disease Control and Prevention [Attachment Form No. 7] < Revised 08/23/2019>

			Processing Time						
() Specimen 7	Test Request		the processing time based on "Testing					
	Form		Prevention."	he Korea Centers for Disease Control and					
	Name of Medical		Admin Name						
Requesti ng	Institution		Admin Contact						
Institution	Address			(Phone:) (Fax:)					
	Name (or Identification Number)		Date of Birth	Sex					
Patient	Date of Confirmation		Date of Specimen Collection						
	Type (Quantity)								
Test Categ									
(1 st or 2 nd)	Collection Classification								
Physician's	Notes								
				Physician: (signature)					
	test is requested in accorda ontrol and Prevention."	nce with Article 4 of the "Re	equest Guideline t	for Testing by the Korea Centers for					
Day/Month	/Year://								
		Directo	r of the reques	ting institution: (signature)					
	ents en for testing quired materials for the test		·						
		Notes							
	uesting party must be a m the requesting institution.	edical institution approved	by the "Medical	Law," and the form must be signed by the					
2. The pho	ne number of the requesting								
	S, please write down the ide								
	pecimen Type (Quantity) bo	ox, write down both the typ	e of specimen ar	nd quantity of each type. (ex. blood sample					
(2))									
		Process Pro	cedure						
г	Complete Surequest form	ubmit Test/Exar	mi <u>ne</u> /	Approve Provide results					
	Requesting party Ko	orea Centers for Disease C	ontrol and Preven	ition (Relevant department)					