

Standard Plan for Operation Continuance of Companies upon Occurrence of an Infectious Disease

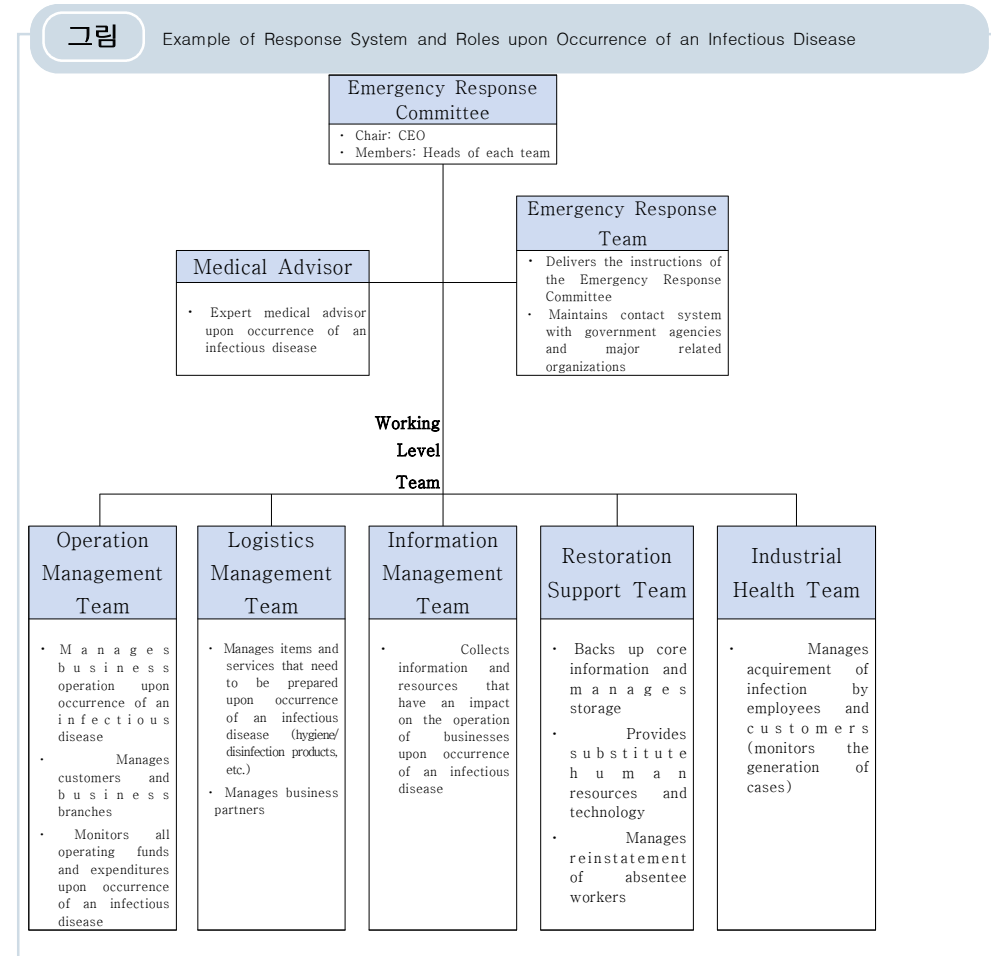
This "Standard Plan for Operation Continuance of Companies" is the prescribed standard plan for companies to continue their operations upon the occurrence of an infectious disease. Each company should refer to this when establishing an operation continuance plan.



Part 1 Organization Chart for Preparation for and Response to the Occurrence of an Infectious Disease

In the case of the occurrence of an infectious disease, each business shall establish a preparatory/response plan, and designate a division/manager to assume this responsibility.

Figure



3.1.1 Emergency Response Committee

- o Makes decisions to enable businesses to continue their operations upon the issuance of a crisis alert by the Ministry of Health and Welfare on the occurrence of an infectious disease
- Chairman of Emergency Response Committee: Final decision-making entity, CEO of a company
- Members of Emergency Response Committee: Managers and heads of each team

3.1.2 Emergency Response Team

- o Delivers instructions of the Emergency Response Committee
- o Maintains contact system with government agencies and major organizations related to companies

3.1.3 Working Level Team (Operation Management Team, Logistics Management Team, Information Management Team, Restoration Support Team, Industrial Health Team)

- o Upon issuance of crisis alert, launches plan for each business area of companies for operation continuity

3.1.4 Medical Advisor

- o Upon the occurrence of an infectious disease, designates a medical specialist for medical advise and emergency measures

(industrial physician, health manager (occupational health nurse))

- o When a medical specialist is not designated, advise should be sought through hospitals that act as treatment bases of each region, or the regional public health center

Part 2 Plan for Continuation of Business

3.2.1 Assessment of major businesses and human resources

- o In the case of occurrence of an infectious disease, an assessment must be made on the status of businesses, including the major human resources and technologies, for the continuation of core operations of companies

- Where are the core operation divisions of the companies?
- Who are the main personnel required for maintaining the core operation divisions?
- What are the major technologies required for maintaining operations?
- If the absence rate rises, is there sufficient backup for human resources and technology?
 - Can other resources be used, if necessary? Can volunteers or retired persons be used?
 - Can work be done from long distance through telephone or email?
- Who are the major personnel necessary to implement the plan for continuation of operations upon the outbreak of an infectious disease?
- Is there an operation system that must be manipulated on a regular basis by the employee in charge?
 - How long can the system be maintained without manipulation?

- o Special measures must be provided for so that people with symptoms, etc. can be managed separately upon the occurrence of an infectious disease

- Work to be done from home from the initial stages of the occurrence of an infectious disease
- Segregation through the provision of a separate workplace

3.2.2 Establishment of business plan to prepare for the occurrence of absences

- o A case of multiple absences could occur with the occurrence of an infectious disease

- ※ Causes for employee absences that could occur due to the occurrence of an infectious disease
 - When the absentee has been infected with the disease, or is suspected of being infected, or is hesitant about returning to work after recovery
 - When the absentee must stay at home to nurse a patient
 - When the absentee is taking care of children that are at home due to temporary closure of schools
 - When it is safer to stay at home

- o In order to reduce damages from large scale employee absences, workers' health information is managed beforehand, and measures are provided to manage employees

- How many employees have an underlying disease, or have a high risk of infection upon the occurrence of an infectious disease due to other health reasons?
- How many employees live alone or have a disability, requiring a helper upon contingency?
- How many employees have children that go to school, and must take care of them at home when schools are closed due to the occurrence of an infectious disease?
- How many employees have few family members, or need to stay at home to nurse due to other family situations upon the occurrence of an infectious disease?

3.2.2.1 Establishment of employee management plan in response to large scale absences

- o Plan to reorganize operations in order to minimize gaps arising from large scale absences
 - Establish work shifts and restructure operations that can be applied for contingencies
 - Provide alternative workplace and plan to adjust work hours: Adopt flexible work hours
 - Plan for alternative working modes with use of the Internet, telephone and mail: Provide situation room which can be run with use of telephone or email
 - Response plan for operations that do not permit working from home, such as manufacturing and production line workers

- o Reinstatement of infected employees to work

- In the case of infected patients, a reinstatement procedure must be in place allowing employees that have worked from home, or stayed at home during the outbreak of the infectious disease, to come back to work upon recovery
- Provide compensation and vacation leave for employees that cannot continue work due to infection
- Employees that have recovered after being infected by the disease attain a natural immune system, and have a low probability of being infected again, which is why there must be much promotion on their ability to be safely reinstated

3.2.3 Establishment of plan to prepare for situation in which there is a lack of supply

- ◆ Possible scenarios upon outbreak of an infectious disease
 - Lack of supply due to surge in demand for hygiene products
 - Lack of materials due to increase in demand for certain services (such as door-to-door services)
 - In the case of suppliers or raw materials that transport goods long distance, such as through ships or airplanes, large scale absences of production workers, delivery related employees or drivers

3.2.3.1 Areas to be planned in order to prepare for lack of supply

- o Plan to manage hygiene products in order to prevent employees and customers from infection
 - Assess the status of hygiene products that are in possession: Soap, hand disinfectant made of alcohol, disposable face masks, thermometer, tissues, personal protective equipment, disinfectant for cleaning purposes, cleaning equipment
 - Need to assess required hygiene products to prepare for the case when the infectious disease persists long term
 - Stock hygiene-control goods
- o Plan to prepare for situation in which materials and goods are lacking due to rise in demand in special business areas
 - Assess business areas which are predicted to experience rise in demand due to occurrence of an infectious disease (door-to-door services, etc.)
 - Assess materials and goods for the continuance of related area

- Designate more than one supplier for materials and goods
- Stock materials and goods in preparation for the occurrence of an infectious disease
- o Company plans to manage goods suppliers (business partners)
 - Assess whether business partners have established a plan for operation continuance, and engage in discussions
 - Plan for substitute human resources and operations restructuring in the case of large scale absences of goods suppliers
 - Assess whether prior stocking of supplies is possible
 - Discuss means of communication upon contingency

3.2.4 Intra-company communication

- #### 3.2.4.1 Provision of communication strategy within companies to take precautions against increase in absences and the spread of groundless rumors with the occurrence of an infectious disease
- o Means of prior education to employees related to infectious diseases
 - Detailed information on the infectious disease, introduction of measures taken by the business site in preparation for the rise of an infectious disease
 - Implement self-management measures related to infectious disease
 - o Assessment of situation of employees through counselling

- Situation that can develop for employees upon the occurrence of an infectious disease (infection of employee that lives alone, infection of employee family member with no one other than the employee him/herself to nurse the individual, large scale absences due to need to take care of children upon closing of schools) and discussions on measures of coping
- o Establish intra-company communication system, such as emergency contact information chart
 - Upon occurrence of infectious disease, prior response measures are delivered rapidly through the emergency contact network, and contact is maintained continuously
- o Build an IT environment for exchange of information such as a website regarding the response within/out of the workplace, and situation of infection occurrences pertaining to the employee, business counterpart, customer, etc.
- o In the case of the occurrence of an infectious disease, a plan must be established to maintain contact with the government agency in charge of the management of the disease, such as the public health center, as well as business partners (goods/services suppliers, etc.), major customers and contractors

Part 3 Management of infections within businesses

3.3.1 Standard for assessing infected cases

Eg) Summary of MERS case example

Confirmed infected cases

Persons with confirmed pathogen of the infectious disease, pursuant to diagnostic standards, showing clinical symptoms that match MERS

Suspected cases subject to diagnosis

(Persons subject to epidemiological survey and diagnosis. This may differ from doctor's patients according to diagnosis and reporting criteria, and may change according to the level of the epidemic)

1. Has the symptoms of fever and respiratory problems, and has done the following within 14 days before the symptoms arose:
 - Visited the Middle East*
 - Has come into close contact with person suspected of being a MERS case, when that patient was showing symptoms
 - Has recently been at a medical institution in a region (country) where MERS has spread, as an employee, patient or visitor
 - Has had contact with camels, eaten camel meat or drunken camel's milk in the Middle Eastern region
- * The Arabian Peninsula and neighboring countries (regions): Bahrain, Iraq, Iran, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Arab Emirates, Yemen
2. If a person has symptoms of fever or respiratory problems, and has done the following within 14 days before the rise of such symptoms:
 - Has come into close contact with confirmed MERS patients
3. Other persons that are classified as suspected cases by a epidemiological investigator
4. When a person is recognized as a suspected case by medical personnel, a request is made to make such a classification to the epidemiological investigator

※ Source: Center for Disease Control webpage (www.cdc.go.kr)

3.3.2 Recommendation to patients suspected of being infected by disease to recuperate at home

- o All business sites and buildings must have a sign with prevention rules, and employees or visitors with symptoms of the infectious disease shall be restricted from entry
 - Prior education shall be given so that persons with the symptoms of the infectious disease are not to go to work
 - Directions shall be provided so that employees showing the symptoms of the infectious disease receive treatment from a medical specialist, and act according to the instructions of the health authority
 - Employees that have recovered from an infection from the disease has attained a natural immune system, and therefore has a low likelihood of being infected again. Thus there should be active promotion of this so that they may be reinstated after recovery.
 - A reinstatement procedure should be established so that the infected employee can recover and be reinstated

3.3.3 Personal hygiene management

3.3.3.1 Promote methods for implementing personal hygiene for employees and visitors

- o Promote means of implementing basic personal hygiene (washing hands, coughing etiquette, etc.) for employees and visitors in order to prevent the spread of the disease within the company

- A sign should be attached to the entries/exits, shower rooms, wash basins of all business sites as well as all public places
- Brochures, newsletters, email, employee bulletin boards, wage statement, etc. should be used to promote the importance of hand hygiene and a clean environment during the outbreak of an infectious disease

eg.) Rules for preventing infection from MERS

1. Adhere to personal hygiene maintenance rules at all times, including washing hands
 - Wash hands frequently with soap and water or a cleanser
2. When travelling (staying) in the Middle East, avoid contact with animals, such as camels, bats and goats
 - In particular, avoid contact with camels (such as visiting camel markets or farms, participating in activities with camels, etc.)
 - Do not eat raw camel meat or drink raw camel milk
3. When coughing or sneezing, cover your mouth and nose with tissue or a handkerchief
 - If you do not have tissue or a handkerchief at hand, cover your mouth and nose with the upper part of your sleeve
4. Try to avoid visiting places where there are many people
 - When this is unavoidable, wear a mask
5. When you have fever or respiratory ailments within 14 days from visiting the Middle East, do not go to a medical institution, but first call the Center for Disease Control Call Center 1339

3.3.3.2 Managing hygiene products

- o Soap, hand cleansers containing alcohol, hand towels, tissues, disinfecting cleaners (rox) etc. could result in insufficiency or problems with supply, and thus prior preparation must be made so that hygiene related products can be supplied

smoothly and well managed

- o Hygiene related goods (soap, hand cleansers, tissues, disposable face masks, etc.) should be positioned in a convenient place for employees to use
- o A wastepaper basket must be positioned so that used tissues can be discarded
- o Upon the occurrence of the infectious disease, disposable masks should be provided to employees showing symptoms

3.3.4 Business site cleanliness, disinfection

- For areas where there is frequent contact by people, cleanliness should be maintained by using rox 50 times diluted
- The air of the interior should be ventilated on a regular basis by using an appropriate air conditioning system or opening the window
- o The recommended method of usage and precautionary measures could differ according to the composition of the disinfectant, and thus the product description manual should be used as a basis
- o For the disinfectant, one that suits the purpose of the disinfecting act must be chosen, and in order to heighten the effects of the disinfecting, the same type of disinfectant must be chosen and used continuously

o « Rules for Safe Use of Pharmaceutical Disinfectant Products »

- The product should be used after careful reading of the user manual
- The product should not be used in combination with or in parallel with another disinfectant
- When diluting the product for usage, the dilution ratio should be in accordance with the instructions
- When using the product, protective equipment such as masks should be worn
- When a person has excessive exposure to the disinfectant, the person should wash it off immediately with water
- Measures should be made to prevent environmental pollution due to use of disinfectants

Chart: Disinfectants
at Business
Sites

Sterilizing disinfectant	Recommended method of usage	Precautionary measures
Sodium hypochlorite: Chlorinated disinfectant such as rox	Used when disinfecting items that are polluted with blood and body fluids	<ul style="list-style-type: none"> • Used in places with good ventilation • Protective clothing to be worn when dealing with undiluted solutions • Due to the danger of chlorine gas emission, combination with strong acid is prohibited • Care must be taken as metal is corroded
Granular chlorine	Used upon dilution when there is no liquid disinfectant available	<ul style="list-style-type: none"> • Same as above
Isopropyl: Disinfectant containing alcohol, 70% Isopropyl alcohol, 60% Ethanol	Used on smooth surfaces such as tables where there is no visible pollutant, or a sterilizing disinfectant cannot be used	<ul style="list-style-type: none"> • Is combustible and toxic • Used in areas with good ventilation • Care not to inhale • Avoid hot kitchen pots, electronic appliances, flames, hot surfaces • Dry immediately after usage
Soap and other cleansers : Antibiotics, and non-antibiotic soap	Used on the hand or soft surfaces	<ul style="list-style-type: none"> • Dry immediately after usage

3.3.5 Infection prevention activities

- o Upon the occurrence of an infectious disease, in order to minimize the spread of the disease among employees, it is important to reduce contact with others as much as possible
 - Teleconference recommended: Use of telephone, teleconference, Internet
 - Unnecessary travel, less important meetings, rallies, workshops and training should be reduced in frequency or length
 - Work from home and flexible working hours recommended

※ Ghost shift change: The previous worker leaves the workplace before the next worker in shift comes in. If possible, there is a time lag before the next person comes in. The window is opened, or the air conditioner is operated to enable thorough ventilation

- Regular disinfection of lounges and places of social exchange
- When conducting face-to-face meetings, hygiene rules must be kept, and distance with persons should be at least 1 meter

Part 4 Measures taken when a case with an infectious disease occurs within the workplace

- o When there is a suspected case, the manager in charge of infectious diseases (Emergency Response Team, Industrial Health Team) registers a report by phone
- o Information is provided on management of the patient through telephone and other means

3.4.1 When a suspected case occurs within the workplace

- o When there is an employee who does not feel well during work, or shows symptoms of the infectious disease, a report is immediately made by telephone to the intra-company disease control manager (Emergency Response Team, Industrial Health Team)
- o A check is made to see if the employee suspected of infection has sudden fever of at least 38°C, accompanied by respiratory symptoms such as coughs and throat pain
- o If the symptoms appear, an investigation is made on whether the suspected case has had contact with an infected case
 - If the investigation shows that he/she has not, the patient is still recommended to receive a doctor's diagnosis
 - If pertaining to at least one of the two, the applicable rules are notified by telephone
 - Definition of "contact": An encounter in which a person is face-to-face with the patient at a distance of within one meter, engaging in conversation
- o In order to prevent the spread of the disease to other

employees, the patient must wear a face mask and leave the workplace

- o Suspected patients should visit the hospital
- o For places suspected of contamination, a disinfectant should be used for disinfecting
- o Adjustments should be made for alternative persons to assume the responsibilities of the absentee during the absence period

3.4.2 When there is a suspected case among visitors

- o Operate an information desk or designate counsellors to prepare for the occurrence of cases among visitors
- o When a visitor shows suspicious symptoms related to the infectious disease, he/she should wear a mask, be isolated in an appropriate place temporarily, and receive diagnosis from a doctor

Checklist for Continuation of Operations

Description	Completed	In progress	Not begun
1. Preparatory actions for continuation of operations			
Have a division and manager been designated that are in charge of establishing a plan to prepare for the occurrence of an infectious disease? (Has an exclusive team been organized)			
Have essential personnel and other core inputs (raw materials, goods, supplies, logistics) been acquired to have continuity in operations for each region and function upon the outbreak of an infectious disease? (Is there awareness on such a need)			
Have substitute human resources been organized?			
Is there a scenario in the case of an increase in demand or decrease in revenue for certain business areas (Company's products or services) upon the occurrence of an infectious disease?			
- Based on multiple scenarios in which a problem occurs in the production line or production area, is there a consideration of the impact of the infectious disease on the financial quality of the company?			
Are reliable, up-to-date information being collected from the health authority, and is a contact network with related agencies being maintained?			
Is there an emergency contact chart within the workplace, and is this regularly updated? (eg: Core contact system with alternative personnel, emergency contact network including customers and suppliers, business situation and employee status review system)			
Is training being conducted to test the plans in preparation for potential outbreak of an infectious disease? Is the plan being upgraded and reviewed on a regular basis?			
2. Preparatory measures for employees and customers			
Is the company preparing for the occurrence of employee absences due to personal infection, nursing of family member, home quarantine, traffic congestion, etc? (Predicting headcount, whether to permit absences, etc.)			
Has the company established guidelines to change the frequency and type of contact (handshakes, conferences, business spaces, etc.) among employees or with customers upon the occurrence of an infectious disease? (Social segregation)			
Is there an evaluation or improvement being made on the availability of medical services for employees?			
Does the preparatory plan reflect a system to assess the required employees and core customers that need assistance during contingencies, as well as the expected areas for which support is required?			

Description	Completed	In progress	Not begun
3. Provision of implementation measures upon outbreak of infectious disease			
Are there provisions on compensation and leave that can be applied to relevant persons when it is not possible to continue operations due to the outbreak of an infectious disease?			
Are there measures related to the work place and change in work hours, such as operations processing via telecommunications, and flexible work shifts?			
Are there measures to prevent infections occurring within the workplace, such as hygiene-related measures, prevention of infection via coughing, immediate separation upon the rise of relevant symptoms?			
Are there measures for sick leave for virus exposure and suspect cases or confirmed cases among employees?			
Are there measures to restrict visits to infected regions, withdraw business sites from infected regions, etc., and to manage reinstatement of employees from infected regions?			
Is there a comprehensive crisis manager, conditions for launch of preparatory measures, and implementation procedure?			
4. Acquisition of resources to prevent spread of infection			
Are hygiene management items sufficiently supplied in all business regions? (Assess quantity per item, check whether this is documented)			
Is there an IT infrastructure for smooth communication among employees or with customers?			
Is there a medical advisor that can be consulted upon the outbreak of a disease, and are there medical advisors and specialists secured to respond to contingencies?			
5. Communication and employee training			
Is education being provided on the basic facts of the infectious disease, and prevention being taught to the individual and family members?			
Is there a plan to resolve employee anxiety and prevent the spread of groundless rumors?			
Is there smooth communication within the organization?			
Has corporate and national disease response/preparation strategy been shared with the employees?			
Is there an information source to assist in securing response measures? For example, is rapid and accurate information collection related to the infectious disease possible?			
6. Cooperation with outside agencies and community			
Is the company sharing information with the public health center, Center for Disease Control, local medical/health facilities?			
Is there information exchange related to exemplary cases in preparing for infectious diseases in each area of the community or in other companies?			