

# Novel Coronavirus Disease 2019 (COVID-19) Infection Prevention Handbook for the General Public

[Version 2]

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This handbook was created based on information  
current as of March 15, 2020.



# Introduction

A pneumonia of unknown cause detected in Wuhan, China was first reported to the WHO Country Office in China on 31 December 2019.

The outbreak was declared a Public Health Emergency of International Concern on 30 January 2020. Then, WHO characterized COVID-19 as a pandemic on 11 March 2020.

There are many things still not understood about the novel coronavirus and the disease it causes. Although some human-to-human transmission has been confirmed, it is not clear how far it will spread.

This handbook was written with the goal of providing everyone with a correct understanding of infectious disease prevention so that you can go about your lives with peace of mind. I hope that this will help prevent respiratory infections, including COVID-19, at home.

This handbook was written based on information current as of March 2020. It may be revised in the future as new information becomes available.

March 16, 2020

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## What is the novel coronavirus (SARS-CoV-2) ?

- Coronaviruses are viruses that mainly infect animals, including bats and camels, but they can also infect humans.
- The Middle East Respiratory Syndrome (MERS) reported in 2012 in Saudi Arabia and the Severe Acute Respiratory Syndrome (SARS) that spread from China in 2002-2003 are both from the same group of coronaviruses.
- The exact source of the novel coronavirus SARS-CoV-2 is not yet known.

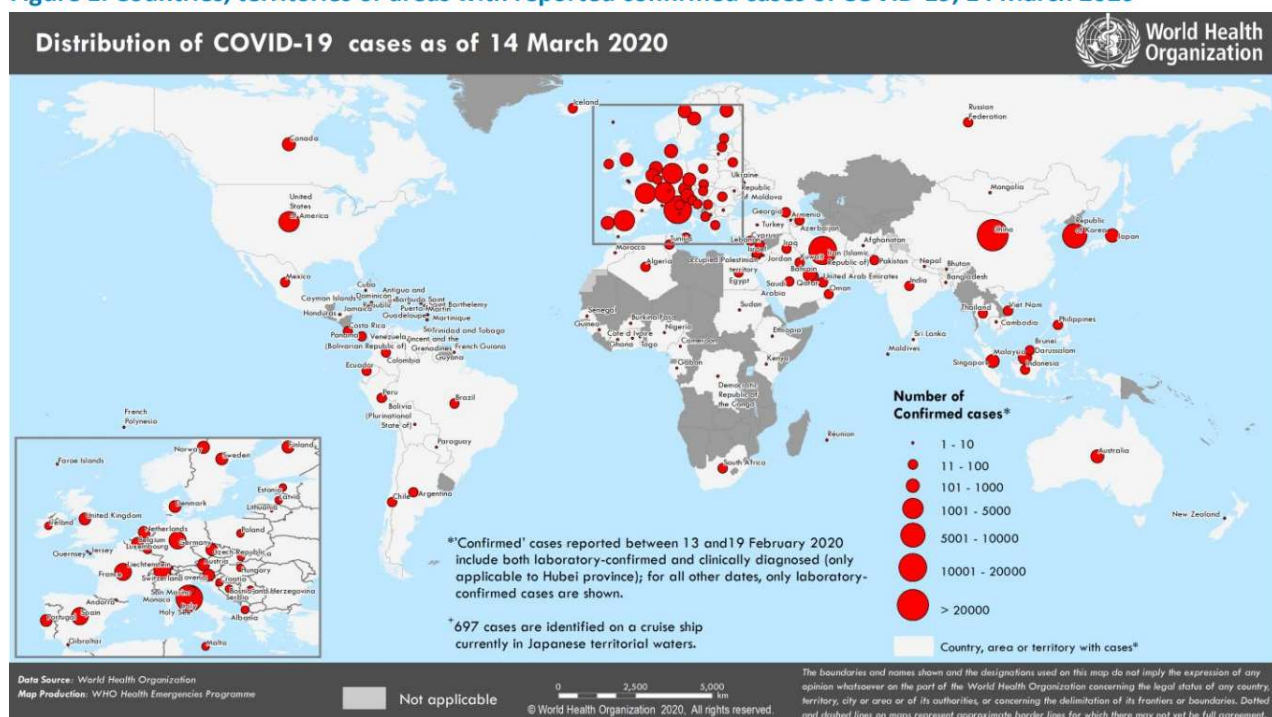
At the end of December 2019, a person who developed pneumonia from unexplained causes was reported in the city of Wuhan. Because many people who developed symptoms had visited a wet market in the city that handled seafood and animal meat, it is thought that an animal sold there may be related. (This market was closed on January 1, 2020.)

- The novel coronavirus SARS-CoV-2 is spread from person-to-person. The World Health Organization (WHO) states that one infected person infects about two people, which is slightly lower than seasonal flu.
- Currently, there is no vaccine or special treatment for the novel coronavirus, so current treatment methods focus on treating symptoms.

## Which countries and regions are affected by the novel coronavirus disease (COVID-19) ?

- The disease appeared in Wuhan City, Hubei Province, China in December 2019, but as of March 15, 2020, there are over 150,000 infected people reported around the world.
- Infections have been reported in more than 140 countries, including China, Japan, Singapore, Thailand, the United States, Australia, Canada, France, and more.

Figure 1. Countries, territories or areas with reported confirmed cases of COVID-19, 14 March 2020



Global Outbreaks (March 14, 2020)  
Source: World Health Organization

## What are the symptoms of the novel coronavirus disease (COVID-19)?

- The main symptoms are **fever, dry cough, headache, and malaise (fatigue and tiredness)**. This appears similar to the common cold, but the symptoms tend to prolong.
- Some people become infected but do not develop any symptoms and do not feel unwell.
- Around 1 out of every 6 people who gets COVID-19 becomes seriously ill and develops difficulty breathing.
- Older people, and those with underlying medical problems like high blood pressure, heart problems, or diabetes, are more likely to develop serious illness.
- **The incubation period\*** is said to be **2-12.5 days**.  
\*The “incubation period” means the time between catching the virus and beginning to have symptoms of the disease.





# How does the virus spread?



**The virus spreads from person to person.**

- In Wuhan, China, many of the infected people had recently visited a wet market in the city. This is why the infection source is thought to have been in the wet market. However, as of now, the infection source remains unidentified.
- There are reports of infections through person-to-person spread. **Most cases reported around the world were infected through close contact with family members, coworkers, or other people who were showing symptoms.**
- “Close contact” is considered to be the following situations:
  - ✓ Living with a sick person suspected to have a COVID-19 infection
  - ✓ Having been in a confined space with a sick person suspected to have a COVID-19 infection
  - ✓ Having come in direct contact with bodily fluids from the coughing, sneezing, runny nose, etc. of a sick person suspected to have a COVID-19 infection

※The droplets from sneezing or coughing can travel as far as 1.5 to 2 meters.





# How does the virus spread?



**The virus spreads mainly from person to person via droplets and contact.**

## What is droplet infection?

- It is the process of when a infected person sends droplets containing the virus flying through coughing, sneezing, saliva, mucus, etc., and someone else gets infected by breathing in those spray droplets through their mouth or nose.

## What is infection through physical contact?

- It is the process of infection when fingers contaminated with the virus touch a person's eyes, mouth, or nose, allowing the virus to enter the body through the mucous membranes.
- After an infected person covers a cough or a sneeze with their hands, when they use those hands to touch doorknobs, light switches, handrails, and other places or objects around them, the virus is transferred to those surfaces. When other people touch those places or objects, the virus contaminates their hands. When they then use those hands to touch their eyes, mouth, or nose, the virus infects them through their mucous membranes.





## What should I do if I develop noticeable symptoms?

If you have traveled abroad in the past 14 days (including to China) or had close contact with someone who has traveled abroad recently or was diagnosed as infected, and within the following 12 days developed symptoms such as fever or cough that are lasting, we recommend the following actions:

- (1) If you have symptoms such as a fever or cough, please avoid going outside as much as possible. When you are with other people or go outside, wear a mask and avoid crowded places.



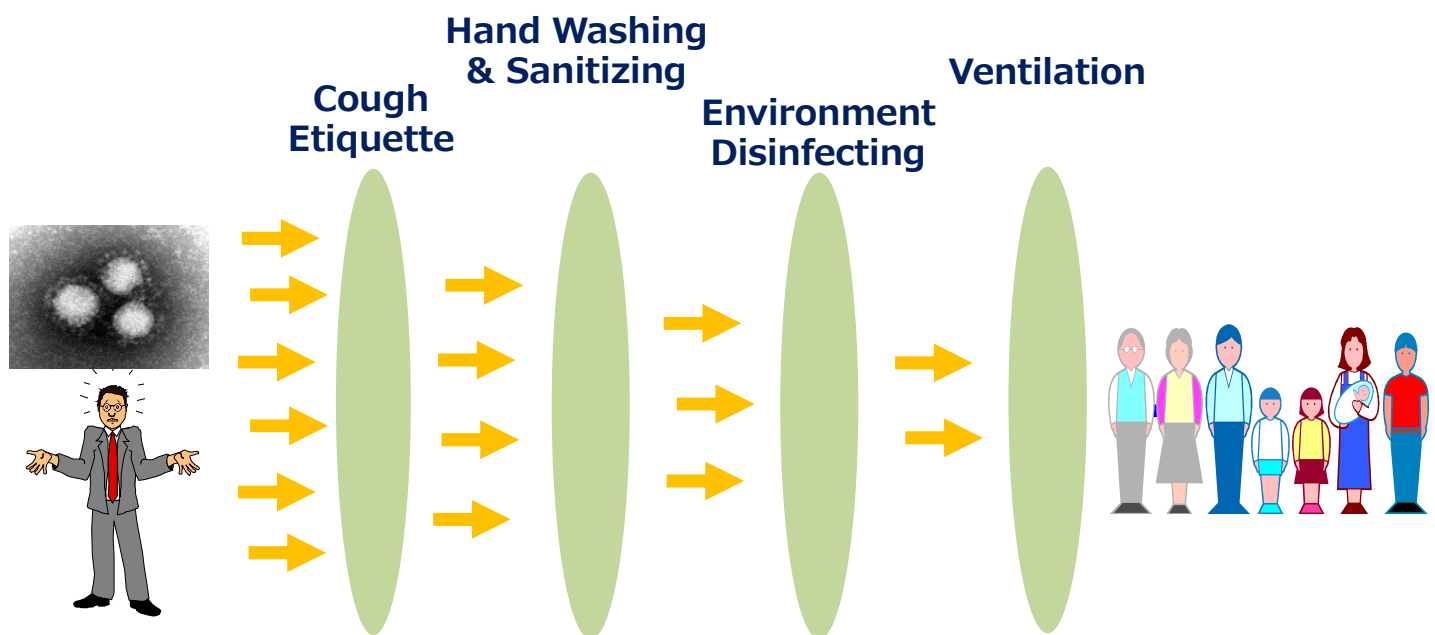
- (2) Check your temperature twice a day (morning, evening).
  - If your temperature is 37.5°C (99.5°F) or higher, you have a severe cough, or you have difficulty breathing, call your local health center immediately.
  - To avoid spreading the infection to other people, do NOT go directly to a medical institution unless you are instructed to by the health center.
- (3) If someone in your family is sick, keep them in a separate room from the healthy people as much as possible. Make sure their room is a room that can be ventilated with windows.

※More details will be explained on the countermeasure methods pages.

# Thoroughly Prevent the Spread of Infection

The basic things you can do to fight infection is wash your hands frequently, use face masks correctly, and stay home when you feel sick.

In order to protect from and to prevent the spread of disease, it is important to combine several countermeasures:



「Reduce the risk of infection as much as possible」

With this motto in mind,  
let's make sure to do each method.



## Method 1.

# Follow Cough Etiquette !

**Masks can prevent droplets and the viruses and pathogens in those droplets from going flying when you cough or sneeze.**

- People with symptoms such as coughing and sneezing should avoid going out as much as possible.
- When you have to go out, make sure to use masks correctly.



**When you cough or sneeze, cover your nose and mouth with a handkerchief or tissue, turn your face away from other people, and move at least one meter away.**

- Immediately throw away your used tissue(s) in the trash can and wash your hands.
- If you do not have tissues, cover your mouth and nose using your sleeve.



**When you are sick with a cough, wear a mask so that you could avoid infecting other people.**

**Ask people who are coughing to please wear a mask.**

## Method 1.

# Follow Cough Etiquette !

### Practice Proper Cough Etiquette



① Wear a mask when you have a cough



② Use a tissue to cover your mouth and nose when you sneeze or cough



③ Turn your face away from people when you cough or sneeze; and move 1+ meters away



④ Immediately throw away your used tissue in the trash can\*



⑤ Wash your hands with liquid soap and running water

\* : Put a plastic bag in the trash can. Use a trash can for which you can throw things away without touching the lid with your hands.

### Use a Mask Correctly

#### How to put on a mask



Check the front and back



Press the nosepiece to the shape of your nose



Stretch out the pleats and adjust to cover your chin

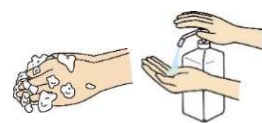
#### How to take off a mask



Without touching the mask's front, grab the ear straps to remove the mask



Holding the strap, throw the mask into the trash can



Wash or sanitize your hands

## Method 2.

# Wash Your Hands !

### How to avoid bringing infectious diseases home...

When you are out and about, it is likely that you are touching places that many other people have touched. You should wash your hands with soap and water or sanitize them with alcohol when you come back home.

### When should you wash your hands at home?

- When you come back home
- When you have touched places many other people may have touched
- After you sneeze, cough, or blow your nose
- After caring for a sick person
- Before cooking
- Before eating
- After handling family and animal body waste
- After going to the bathroom



**This is the same whether you are at home or out and about.**

**When you do not have access to a sink or alcohol, or for small children or elderly people with handicaps, thoroughly scrub both hands with alcohol wet wipes.**

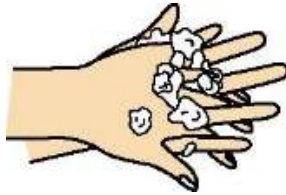
## Method 2.

# Wash Your Hands !

### Washing with soap & water



①Wet your hands with water, put soap in palms, and rub together well



②Rub the back of both hands with fingers interlaced



③Wash fingertips and under the nails well



④Thoroughly clean between fingers



⑤Use your palms to grip thumbs and twist



⑥Scrub your wrists



⑦Rinse well with running water



⑧Dry well with a paper towel (Use the same paper towel to turn off faucet)

### Sanitizing hands with alcohol



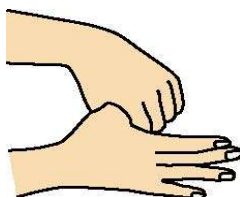
①Put an appropriate amount of disinfectant in your palm



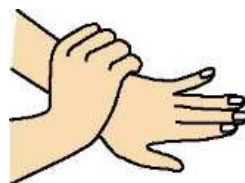
②Rub the disinfectant well into the front and back of your hands



③Rub well into fingertips, backs of fingers, and between fingers



④Use your palms to grip thumbs and twist



⑤Use your palms to rub disinfectant into your wrists



⑥Continue to rub it in until it dries





## Method 3.

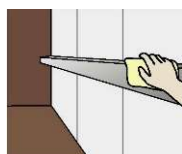
# Environment Disinfecting • Ventilation

When people use their hands to cover their nose or mouth when they cough or sneeze, the virus gets on their hands. By using those hands to touch handrails, tables, doorknobs, etc., the virus gets onto surrounding surfaces. Then, other people unknowingly touch those surfaces and infect themselves when they touch their mouth, nose, or eyes.

### <Surface and Environment Disinfecting>

- Disinfect places that your family touches often (doorknobs, light switches, remote controls, washbasins/sinks, toilet handles, etc.).
- 1-2 times a day, use diluted chlorine bleach (0.05% sodium hypochlorite solution) or a tissue wetted with alcohol to wipe down doorknobs, tables, handrails, light switches, and other places hands frequently touch.

※ After disinfecting an area with bleach (sodium hypochlorite solution), wipe it again with water to prevent deterioration.







## Method 3.

# Environment Disinfecting • Ventilation

### <Ventilation>

- To prevent the spread of infectious disease, the room should be well ventilated to reduce the amount of virus in the room. Keep the air in the room fresh by opening windows and doors wide for 5-10 minutes every 1-2 hours throughout the day.



### <Sharing Space with a Sick Person>

- To the extent possible, sick family members should stay in a separate room from healthy ones. That room should be one that can be ventilated with windows.
- The sick person and the other people living with them should all wash their hands with soap frequently. When they interact within 1-2 meters of each other in the same room, everyone should wear masks.



# Infection Prevention FAQ

※ Because of the current lack of information about the novel coronavirus disease infections, explanations will follow guidelines for the Middle East Respiratory Syndrome (MERS), which belongs to the same group of coronaviruses.

## **Q1. What should I be careful about when caring for someone with a (suspected) coronavirus infection?**

- A. If possible, have sick family members stay in a separate room from healthy ones, and make only one person the designated caregiver.

By limiting caregiving to one person as much as possible, the risk of contact with the infection is reduced.

When providing care, wear a mask and gloves. Put used masks and gloves into a plastic bag, tie closed, and throw away. Wash hands frequently.

The caregiver should check their own temperature twice a day, paying careful attention to whether or not they themselves show symptoms of infection.



**Sick Person**

Wear a mask



**Caregiver**

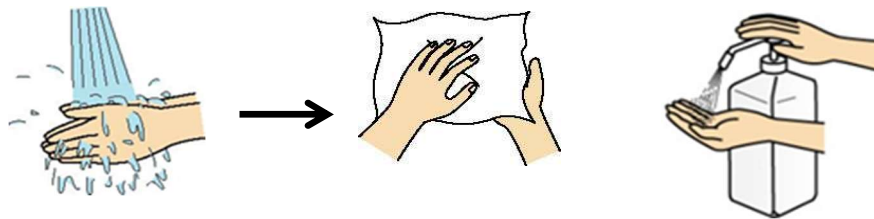
Wear a mask and gloves  
Wash or sanitize hands frequently



# Infection Prevention FAQ

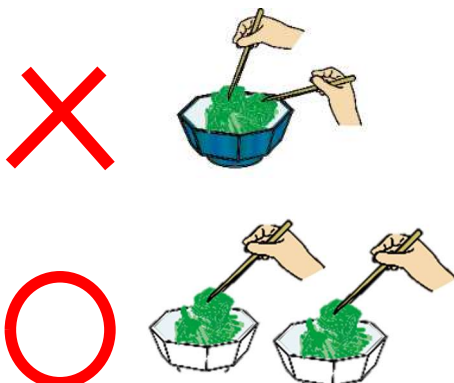
## Q2. What should I pay attention to about washing hands?

- A. Wash hands frequently. Wash with running water and soap. After washing, use paper towels or tissue to dry your hands completely. Avoid sharing towels with other family members. Set up alcohol-based sanitizer in a spot so that you can sanitize your hands anytime.



## Q3. What should I be careful of at meals?

- A. When eating a meal with someone who may be infected, avoid sharing dishes. After using dishes, wash them well with dish soap. If you are concerned, soak them in boiling water or disinfectant for at least 10 minutes before washing as usual; then anyone can use those dishes.



### Serve meals on separate dishes

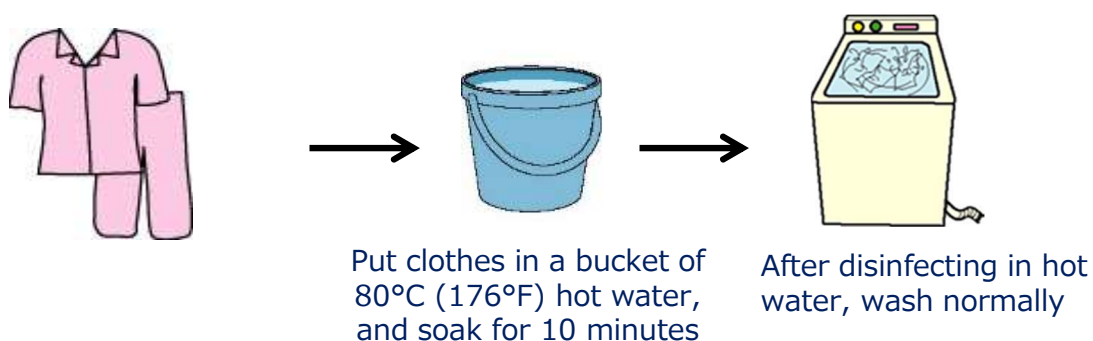
Do not serve yourself from a shared serving dish

After disinfecting and washing used dishes normally, other people can use them

## Infection Prevention FAQ

### Q4. What should I do for clothing and bedding?

- A. Avoid sharing. If there is a possibility that body fluids such as diarrhea and vomit may be present on clothes, futons and pillowcases, disinfect them in boiling water at 80°C (176°F) for at least 10 minutes, and then wash normally. If you are worried, wash them separately from other people's clothes. If discoloration is not a concern, soaking in diluted sodium hypochlorite solution (used at 0.1%) is also effective.



### Q5. How should I be careful when I throw away trash?

- A. When you want to throw away tissues used to wipe saliva or phlegm from a sick person, or throw away used items from caregiving, put a plastic bag in the trash bin beforehand and discard them in there. Tie the bag shut and be careful that your hands will not touch the discarded items.





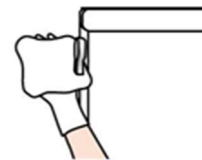
# Infection Prevention FAQ

## Q6. What should I make sure to do regarding the toilet?

- A. For toilets with lids, put down the lid before flushing. When a potentially-infected person uses the toilet, closing the lid prevents the virus from going flying during flushing.

Make sure the bathroom is well-ventilated.

After a potentially-infected person uses the bathroom, use a tissue or cleaning cloth soaked with disinfectant to wipe down the areas where hands touch, such as the toilet bowl, toilet seat, door knobs, light switches, and the toilet's flush handle, with a tissue or cleaning cloth soaked in a disinfectant solution.



### Cleaning and Ventilating the Bathroom

After using the toilet, use a cloth soaked in disinfectant to wipe down the toilet bowl, toilet seat, doorknobs, light switches, toilet handle, and other places that hands may touch.

Disinfectant: Alcohol, or sodium hypochlorite (bleach) solution diluted to 0.05%



# Infection Prevention FAQ

## Q7. How should I clean the room?

- A. Use alcohol disinfectant at least once a day to sanitize places that hands often touch, such as tables, doorknobs, toilets, etc. If it is visibly soiled with bodily fluids or excrement, wipe it with disposable paper towels, etc. soaked in a disinfectant (diluted sodium hypochlorite solution [bleach]). If bleach is used, the metal may rust, so wipe with water after disinfecting. Alcohol-based disinfectant is also effective.



It's easy if you use a plastic bottle.  
One capful is about 5mL.

### NOTE

#### How to Make Disinfectant (diluted sodium hypochlorite solution)


Disinfectant Concentration	Original Liquid Concentration*	How to Make It	What to Use It For
0.1%	5%	Put 10mL (2 capfuls) of original liquid into a 500mL bottle of water	Cleaning vomit and feces
0.05%	5%	Put 5mL (1 capful) of original liquid into a 500mL bottle of water	Disinfecting cookware, bathroom doorknobs, toilet seats, floors, clothing, etc.

\* Please check the label because the concentration of chlorine in chlorine bleach varies depending on the product.

### CAUTION!

When using sodium hypochlorite:

- When disinfecting, ventilate well.
- The effectiveness of diluted products decreases over time. Use it all up every time.
- To avoid accidentally drinking it, do not make it ahead of time.
- Do not use it to sanitize hands.
- Store it out of the reach of children, etc., because it is dangerous.

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