

# Infection Prevention and Control Guidance for COVID-19

Shanghai Maritime University

# Physicochemical properties of COVID-19

U V



Disinfectant

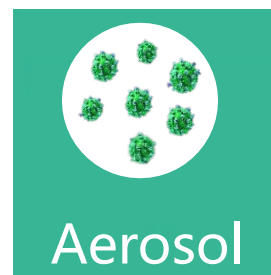
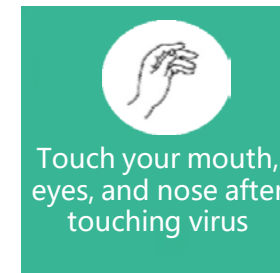
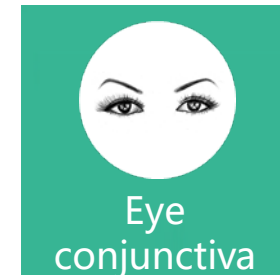
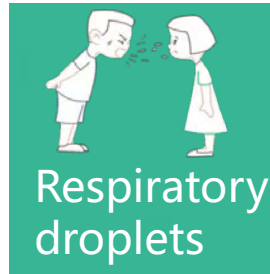


- 75% ethanol
- Diethyl ether
- Chloroform
- Disinfectant with chlorine
- Peroxyacetic acid



56°C 30min

# The main route of transmission



- When exposed to high concentrations of aerosol for a long time in a relatively closed environment, there is a possibility of aerosol transmission

# How to distinguish between the common cold, flu and COVID-19

Common cold	Flu	COVID-19
<ul style="list-style-type: none"><li>• Nasal congestion, runny nose and other upper respiratory symptoms.</li><li>• No obvious fever, fatigue, headache, arthralgia, general discomfort, loss of appetite, etc.</li><li>• Symptoms of the upper respiratory tract are usually more pronounced and systemic symptoms are milder.</li></ul>	<ul style="list-style-type: none"><li>• Respiratory infections caused by influenza virus infection</li><li>• Acute onset, symptoms such as high fever, sore throat, headache, muscle soreness, and loss of appetite.</li></ul>	<ul style="list-style-type: none"><li>• Fever, fatigue, dry cough, and a few patients with symptoms such as nasal congestion, runny nose, and diarrhea.</li><li>• Some patients only show low fever, mild fatigue, etc., without pneumonia</li><li>• Diagnosis still requires a combination of epidemiological history and laboratory test results.</li></ul>

The three pathogens are different

# Suspected and confirmed cases of COVID-19

Suspected case	History of epidemiology	<ul style="list-style-type: none"><li>• Travel history or residence history in Wuhan and surrounding areas, or other communities with case reports within 14 days before onset.</li><li>• History of contact with new coronavirus infection (positive nucleic acid test) within 14 days before onset.</li><li>• Patients with fever or respiratory symptoms from Wuhan and surrounding areas, or from a community with case reports in the 14 days before onset.</li><li>• Cluster onset.</li></ul>
	Clinical manifestation	<ul style="list-style-type: none"><li>• Fever and / or respiratory symptoms.</li><li>• With pneumonia imaging features.</li><li>• Normal or reduced white blood cell count or reduced lymphocyte count in early onset</li></ul>
	Diagnostic criteria	<ul style="list-style-type: none"><li>• Have any 1 of epidemiological history and meet any 2 of clinical manifestations</li><li>• If there is no clear epidemiological history, it meets 3 of the clinical manifestations</li></ul>
Confirmed case	<ul style="list-style-type: none"><li>• Suspected cases, those who test positive for nucleic acid are confirmed cases</li></ul>	

# How to do home medical observation

(People with travel history of COVID-19 endemic areas)



## Community registration

- Reduce outings
- Avoid going to crowded public places



## Health monitoring

- Self-health monitoring for 14 consecutive days, temperature measurement twice a day
- Try to live alone
- Reduce close contact with family



Seek medical attention if suspicious symptoms are found



Pay attention to protection during medical treatment

# How to take preventive measures during COVID-19

Develop  
good  
hygiene  
habits

Window  
ventilation

Wash your  
hands  
frequently

Less party  
with others

Wearing  
masks  
when  
going out

Develop  
a healthy  
lifestyle

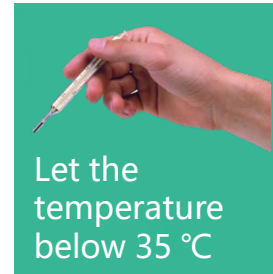
Good  
health  
monitoring

No contact no  
purchase wild  
animals

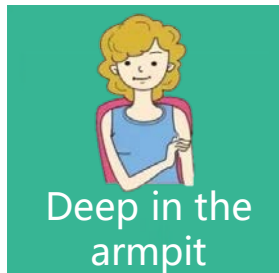
# How to properly measure underarm temperature



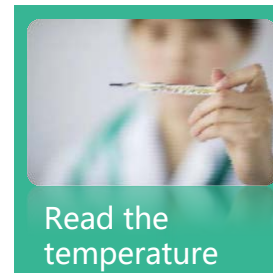
Alcohol  
disinfection



Let the  
temperature  
below 35 °C



Deep in the  
armpit



Read the  
temperature

- Cling to the skin
- Clamp for 10 min

Normal armpit temperature  
between 36-37 ° C



## When to see a doctor

At the same time

Fever (armpit temperature  $\geq 37.3^{\circ}\text{C}$ ), cough, shortness of breath, and other symptoms of acute respiratory infections.



Within 14 days before the onset, have travel history or living history in Wuhan and surrounding areas, or other communities with case reports; have contact history with 2019-nCoV infected people (positive nucleic acid test); or have been in contact with Wuhan and surrounding areas, or other patients with fever or respiratory symptoms in the case-reporting community.



# Precautions for going to the hospital



Take the private car



Wear the mask



Keep away from others



Vehicle disinfection



Tell the truth

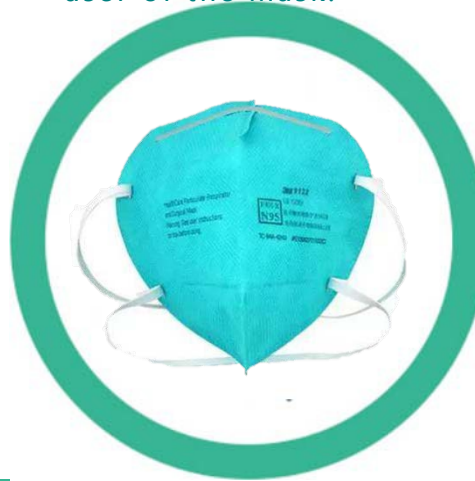
# How to keep and clean masks

## Reuse

- Hang in a clean, dry place, or place it in a clean, breathable paper bag.
- Masks should be stored separately to avoid contact with others and identify the user of the mask.

Not washable  
Not disinfection  
Not heatable

Medical standard  
mask



Clean the  
respirator  
according  
to the  
instructions

Cotton  
gauze mask  
can be  
cleaned  
and  
disinfected

# Why washing hands can effectively prevent respiratory infections



In daily work and life, hands are constantly in contact with items contaminated with viruses and bacteria. If the hands cannot be washed properly, the pathogens on the hands can enter the body through contact with the mucous membranes of the mouth, eyes and nose.



Washing your hands can simply and effectively cut off this route, keeping your hands clean and hygienic can effectively reduce the risk of infection with the COVID-19.

# How to wash your hands

Wash your hands with running water and soap (or hand sanitizer). Rub each hand for at least 20 seconds.



掌心搓掌心



手指交错掌心搓掌心



手指交错掌心搓手背  
两手互换



两手互握互擦指背



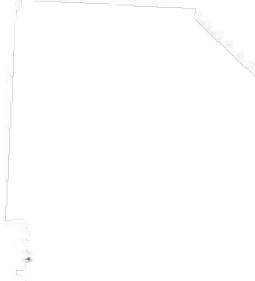
指尖摩擦掌心两手互换



拇指在掌中转动两手互换



一手旋转揉搓另一手的腕部、  
前臂，直至肘部，交替进行



# Commuting Precautions



Minimal use of public transport for commuting, it is recommended to walk, ride or commute by private car.



If you must take public transportation, wear disposable medical masks. Avoid touching the items on the car with your hands during the journey, avoid touching the mouth, eyes, and nose with your hands. Try to keep a right distance from others, and open the windows when necessary.

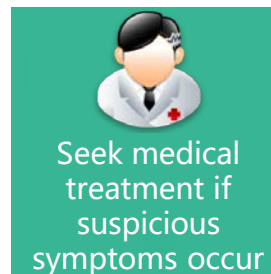
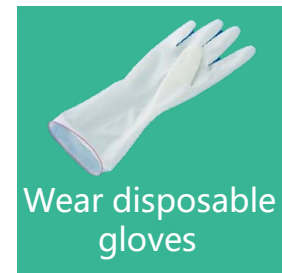
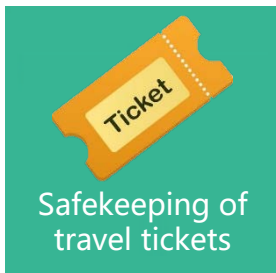
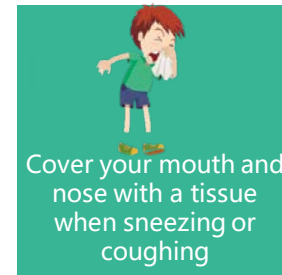
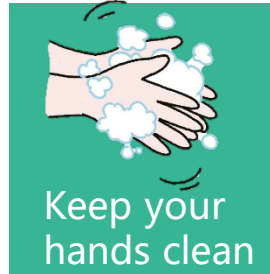


Cover your mouth and nose with a tissue when sneezing or coughing.



It is recommended to wear gloves on the way to work. Disposable gloves cannot be reused. Other reuse gloves should be cleaned and disinfected everyday.

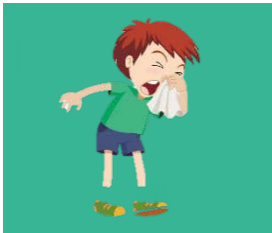
# Notes for students on their way back to school



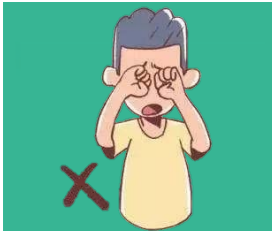
# How to protect yourself in public places



Minimize activities in crowded public places. If you must go, you should do personal protection and wear disposable medical masks properly.



- When coughing or sneezing, completely cover your nose and nose with a paper towel and throw the used paper towel into a closed bin.
- If you cover with your hands when you cough or sneeze, wash your hands with running water and soap, or scrub your hands with alcohol disinfectant.



Avoid direct touching with hands after touching public goods or facilities.



Wash your hands properly after going home to ensure hand hygiene and avoid hand-to-hand transmission.



# How to take personal protection in public transport



Keep a right distance in the car



Wear the mask



Do not touch your mouth, nose, or eyes with your hands



Cooperate with the temperature detection



Wash your hands immediately after back home

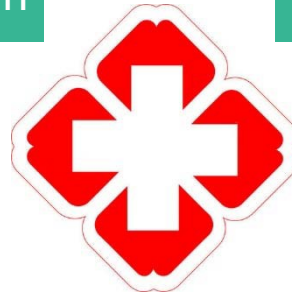
# How to do personal protection if you go to the hospital for other diseases



Online  
registration



Wear the  
mask



Wear  
disposable  
gloves



Keep your  
hands clean

## What to note in the office



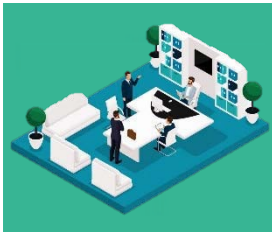
- It is recommended that the office area be ventilated 3 times a day, not less than 15 minutes each time. Pay attention to keep warm when ventilating.
- Maintain a distance of more than 1 meter from others, and wear disposable medical masks in office.
- Wearing mask when receiving outsiders .



- Put paper towels you used in a covered trash can. If no paper towels are available at the time, use clothes to cover your nose and mouth.
- Wash your hands frequently and drink plenty of water, and insist on washing your hands before eating, after going to the toilet, sneezing, coughing.



- Keep your desk clean.
- Telephone can be cleaned and disinfected with alcohol cotton balls once a day, and can also be cleaned with disinfectant wipes.



Keep the office clean.

# What to note in the teaching area



Do not touch your mouth, nose, or eyes with your hands



Wear the mask



Seek medical treatment if suspicious symptoms occur



Keep distance

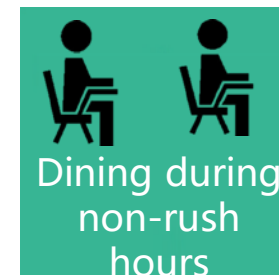
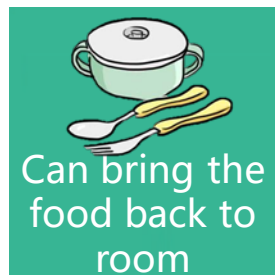
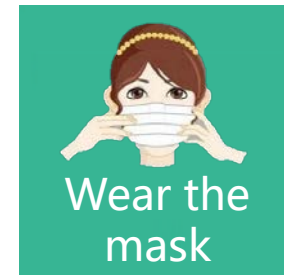
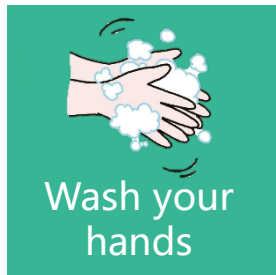


Cover your nose and mouth with a tissue when sneezing or coughing



Turn off the air conditioning

## What to note when dining in the canteen



## What to note in dormitory

Measure body temperature, do morning inspections as required.

It is recommended to use less air-conditioning, open the window at least 3 times a day for more than 30 minutes each time.

Regular life, don't stay up late, pay attention to keep warm, drink plenty of water.

Develop good personal hygiene habits, wash hands after using the toilet, and keep clothes, bedding clean.

Try not to drop in and keep a right distance, especially with people who cough, sneeze and fever.

Domestic garbage is put in as required, and used masks should be thrown away into covered bins.

Seek medical treatment if suspicious symptoms occur.

Do not touch the wild cats, birds in the campus.

# What to note in the library



Wear the  
mask



Cooperate with the  
temperature  
detection



Turn off the air  
conditioning and  
keep warm



Cover your nose  
and mouth with a  
tissue when  
sneezing or  
coughing



Do not go to  
library when you  
have a cold or  
cough



Keep distance