

# Let's know COVID-19 and prevent its infection !

One World One Health  
Research Forum



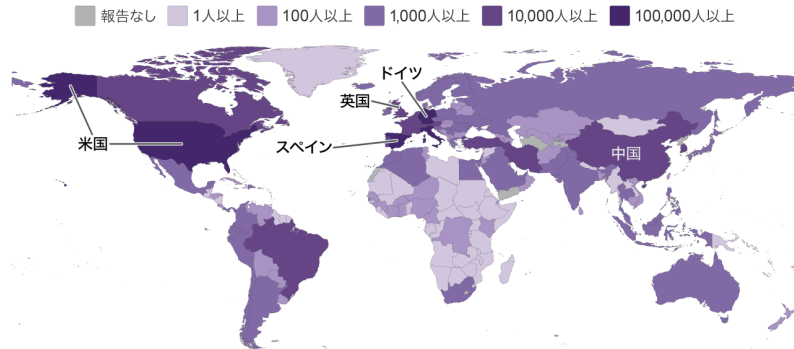
Edit: KH, Narration: YM, SM, ET

# COVID-19の現状

Corona Virus Disease, 2019

<出典> 4月8日時点 WHO・各国政府発表

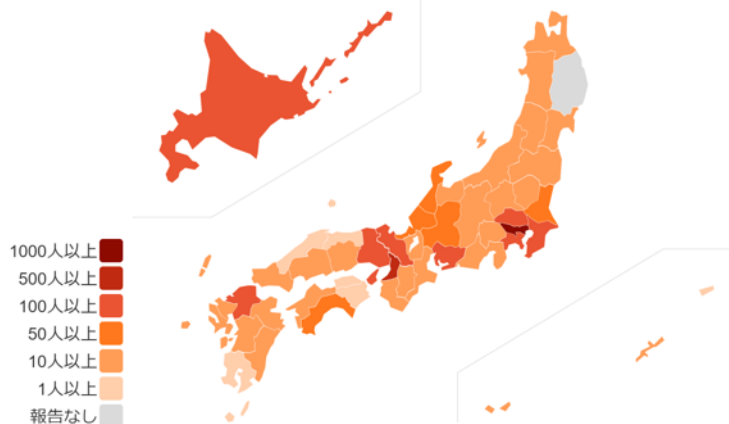
## 各国の感染状況



※中国および直近1週間で30,000人以上感染者数が増加した国名を記載しています

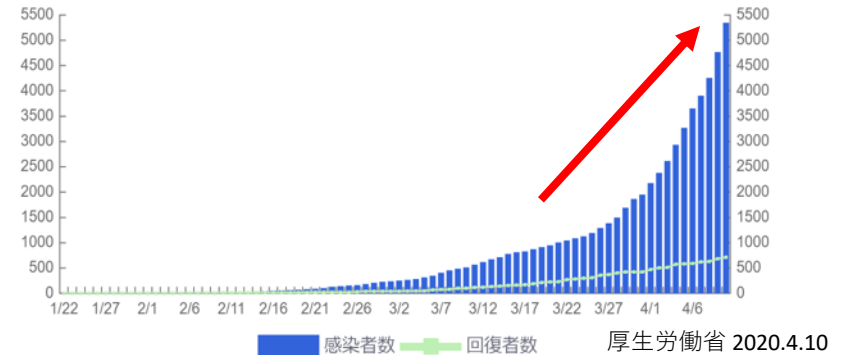
<出典> 4月11日時点 厚生労働省発表

## Infection status in Japan

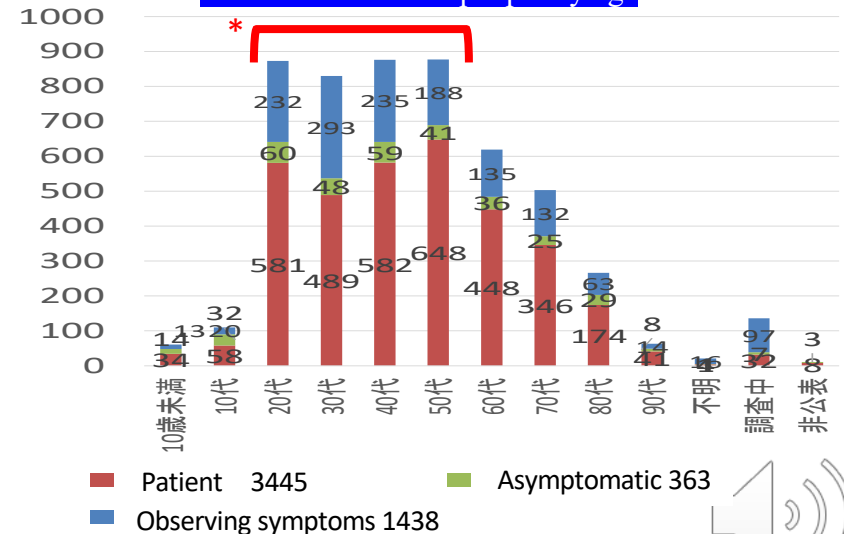


COVID-19: Disease name  
SARS-CoV2: Virus name

## Number of infected people in Japan



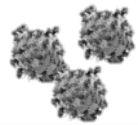
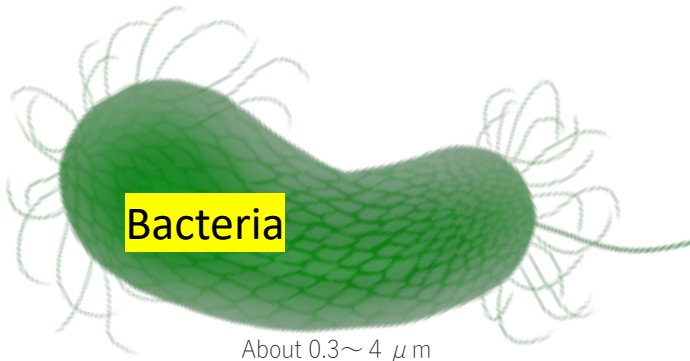
## Number of infected people by age



\* Many people in their 20s to 50s are infected: Some people have no symptoms

# What is a virus?

Its size is nanometer (nm)  
Smaller than bacteria ( $\mu\text{m}$ )



Coronavirus

Diameter 100~200 nm

Feature	Virus	Bacteria
Composition unit	ウイルス粒子	細胞
Gene	DNA or RNA	DNA
Self-propagation	Incapable	Can
Energy synthesis (ATP)	Incapable	Can
Protein synthesis	Incapable	Can

A virus can only grow if it infects living cells.



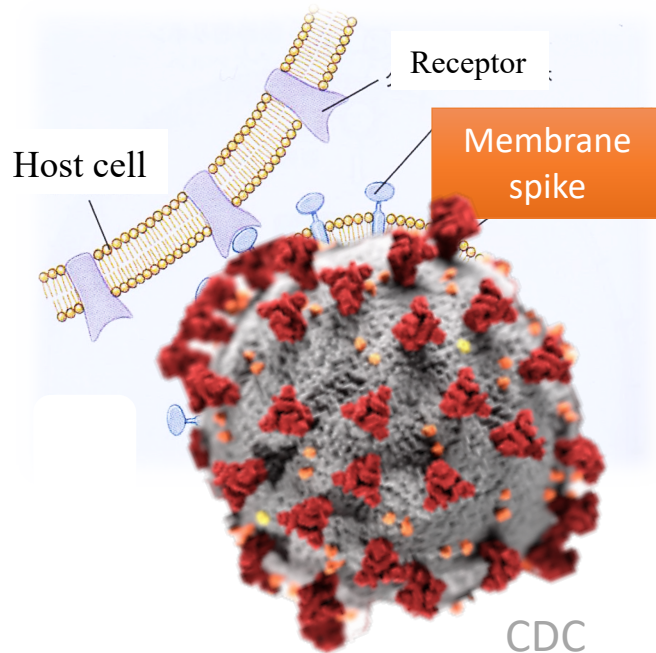
# SARS-CoV2とは？

Severe Acute Respiratory Syndrome Coronavirus 2

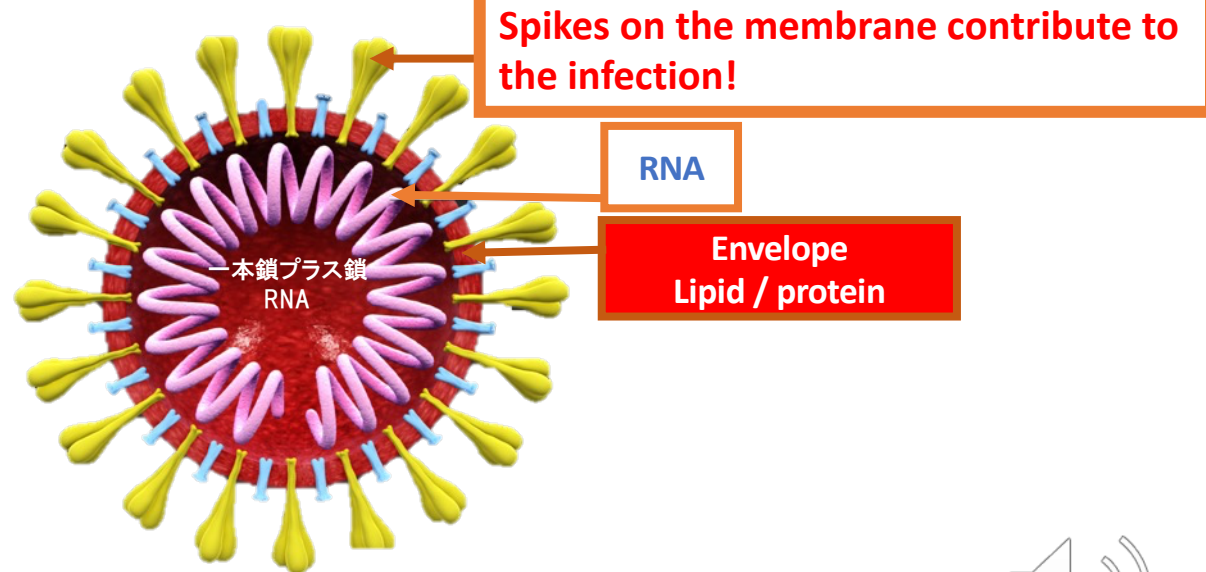
Coronaviruses include viruses that infect humans and animals. There are types that infect various animals such as cats, pigs, and cows.

7 types of "coronavirus" that infect humans

- 4 types are common causative viruses
- 3 types show serious symptoms
  - SARS coronavirus (SARS-CoV, SARS-CoV2)
  - MERS coronavirus



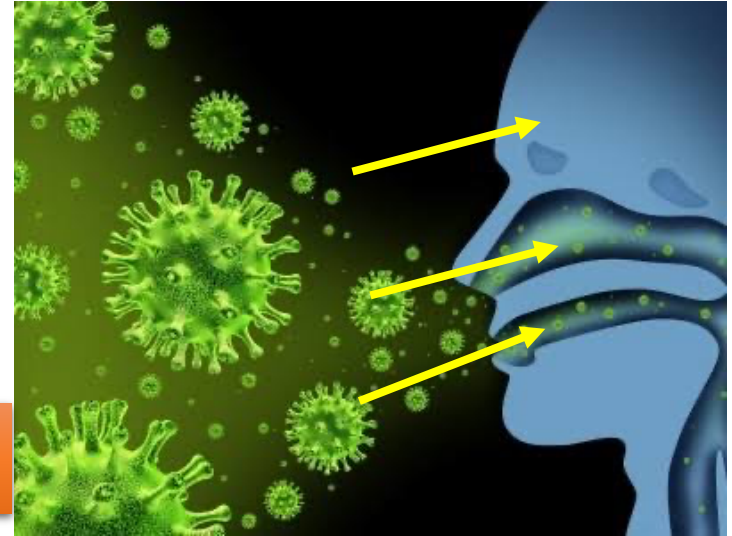
Infection is the relationship between keys and keyholes



# Why do we get the virus ?



The risk of virus infection is about 2m  
It is important that you do not spread or receive the droplet !



- ✓ The virus infects the eyes, nose, and mouth.
- ✓ The virus on your hands infects your eyes, nose, and mouth



Masks are effective in preventing the spread of droplet !  
Wear a mask if you have a cough, sneeze or fever.

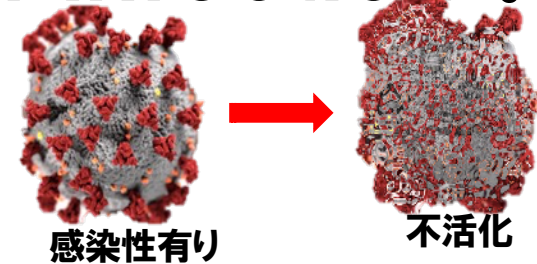




# To protect yourself from infection !



- ✓ There is a virus on your hands.
- ✓ It is important to wash your hands often and keep them always clean !



“Disinfection” is effective for breaking the virus membrane !

- Alcohol disinfection (more than 60%) for disinfection
- Hand washing with soap is effective (30 seconds)
- Door knobs, handrails and desks can be effectively wiped with 0.05% chlorine bleach.

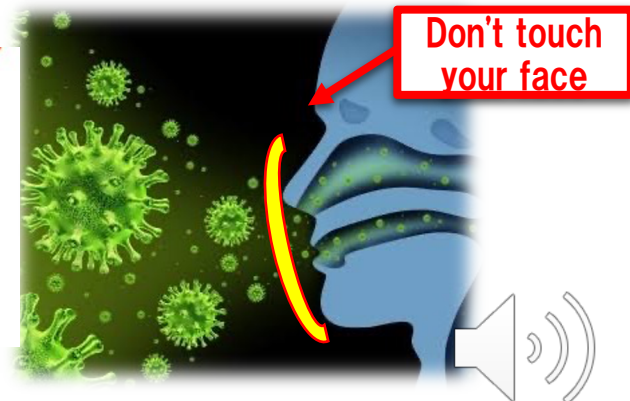
## Strengthening immunity (Building a body to eliminate viruses)



A healthy lifestyle with a well-balanced diet and adequate sleep



## Avoid crowding



# Avoid the “Three C’s”

Important notice for preventing COVID-19 outbreaks.

## Avoid the “Three Cs”!

**1. Closed spaces** with poor ventilation.

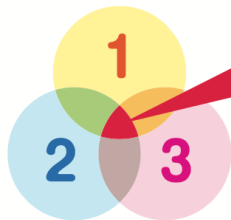
**2. Crowded places** with many people nearby.

**3. Close-contact settings** such as close-range conversations.



One of the key measures against COVID-19 is to prevent occurrence of clusters.

Keep these “Three Cs” from overlapping in daily life.



**The risk of occurrence of clusters is particularly high when the “Three Cs” overlap!**

In addition to the “Three Cs,” items used by multiple people should be cleaned with disinfectant.



Factors causing clusters of infection

- ✓ Activities that increase the amount of ventilation (breathing)
- ✓ Screaming and singing closely
- ✓ Close up in an enclosed space
- ✓ Even if you do not cough or sneeze, the virus will be excreted and others will be infected

(2020/4/18 JAID Emergency Symposium)

# Important thing

## To prevent infection

- Wash well, avoid crowds, ventilate
- Attention to not transmit the virus to others
- Your actions may infect your relatives. Think you might be infected!
- Infection can be prevented by avoiding unnecessary outings!
- After returning from the area where the emergency was declared, refrain from going out for a while and check the health condition.

## When you may be infected

- If you have a cold, such as a fever, cough, nasal discharge, or abnormal olfaction, stay in the room.
- Check your health every day.
- Avoid visiting friends' homes with symptoms as much as possible.
- Avoid contact with sick people and encourage masks and hand washing.

## Maybe ... I might have been infected !!

- If you have a fever of 37.5 °C or higher for 4 days and have strong fatigue (fatigue) or difficulty in breathing (dyspnea), call a health center or other organization.
- Returnee / Contact Person Consultation Center  
[https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/kenkou\\_iryou/covid19-kikokusyasessyokusya.html](https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/kenkou_iryou/covid19-kikokusyasessyokusya.html)
- If you are worried about influenza etc., please consult your GP as usual.





# For the latest information, click here

- Ministry of Health

- [https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/0000164708\\_00001.html](https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/0000164708_00001.html)
- <https://www.forth.go.jp/topics/fragment1.html>
- <https://www.forth.go.jp/useful/attention/index.html>

- National Institute of Infectious Diseases

- <https://www.niid.go.jp/niid/ja/>

- Ministry of Foreign Affairs

- <https://www.anzen.mofa.go.jp>

- WHO

- <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

