



香港紅十字會
HONG KONG RED CROSS



保護生命
Protect human life

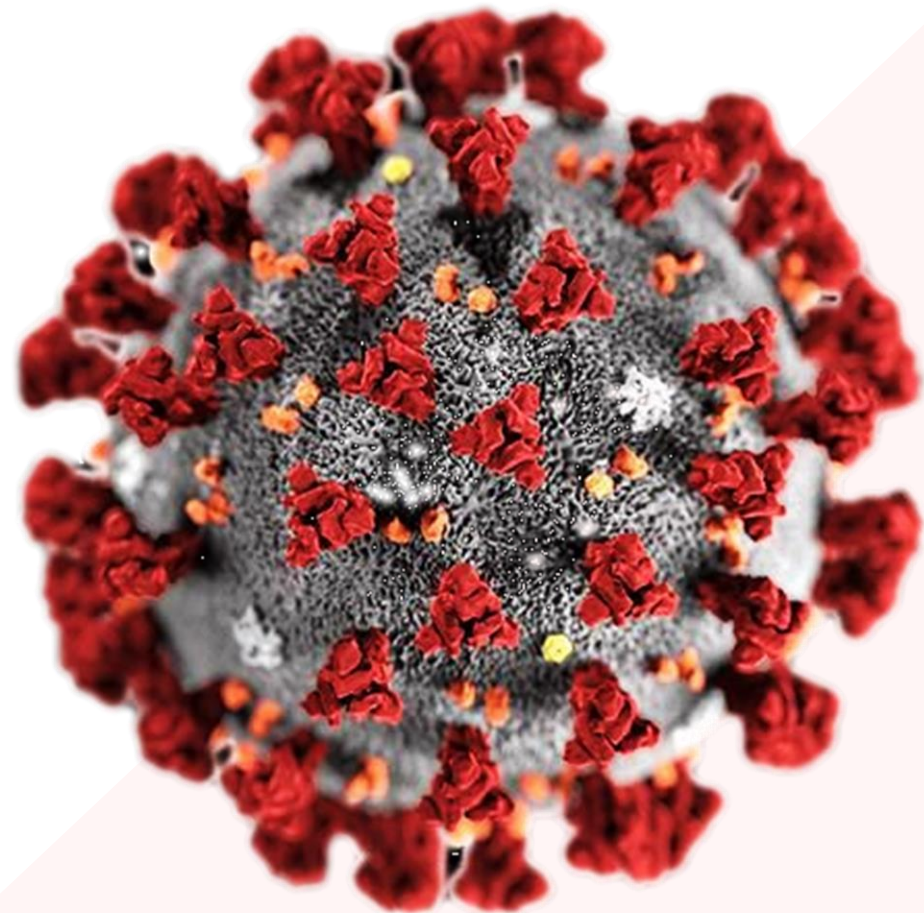


關懷傷困
Care for the health
of the vulnerable

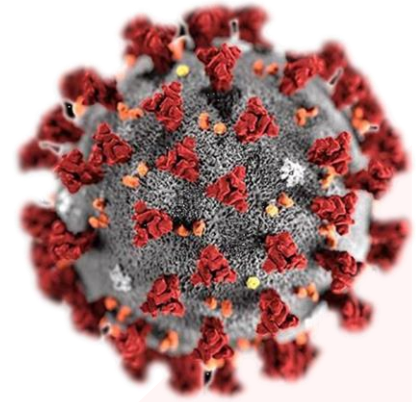


維護尊嚴
Respect human dignity

Coronavirus disease 2019 (COVID-19)



COVID-19: Introduction



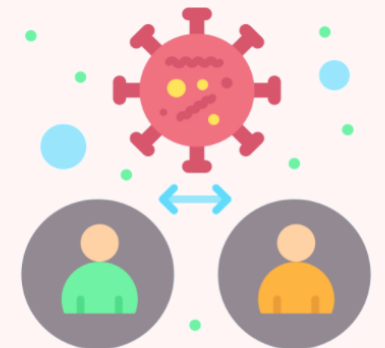
- Caused by a new coronavirus called SARS-CoV-2
- SARS-CoV-2, SARS-CoV and MERS-CoV are all species of coronavirus
- **Coronavirus** is originated from animals, initial cases were virus transmitted from animals to humans
- But the virus has transmitted from person to person since December 2019

COVID-19: Transmission

- Liquid particles will be released from nose or mouth when the patients cough, sneeze, speak, sing, or take a deep breathe
- The size of liquid particles ranged from bigger "droplets" to smaller "aerosol"

Process

- **Touch** the contaminated objects, then touch eyes, nose or mouth by the same hand
- Virus-containing **droplets** are inhaled, or contacted with others' eyes, nose or mouth
- Higher risk of infection in less than 2m distance with the patient



COVID-19: Transmission

Process

- Short-range airborne transmission could occur in poor-ventilated or crowded indoor area
- Medical procedures produce airborne-related infectious aerosols (Aerosol can be suspended in the air or floated to 1m away)



COVID-19 : Mutation



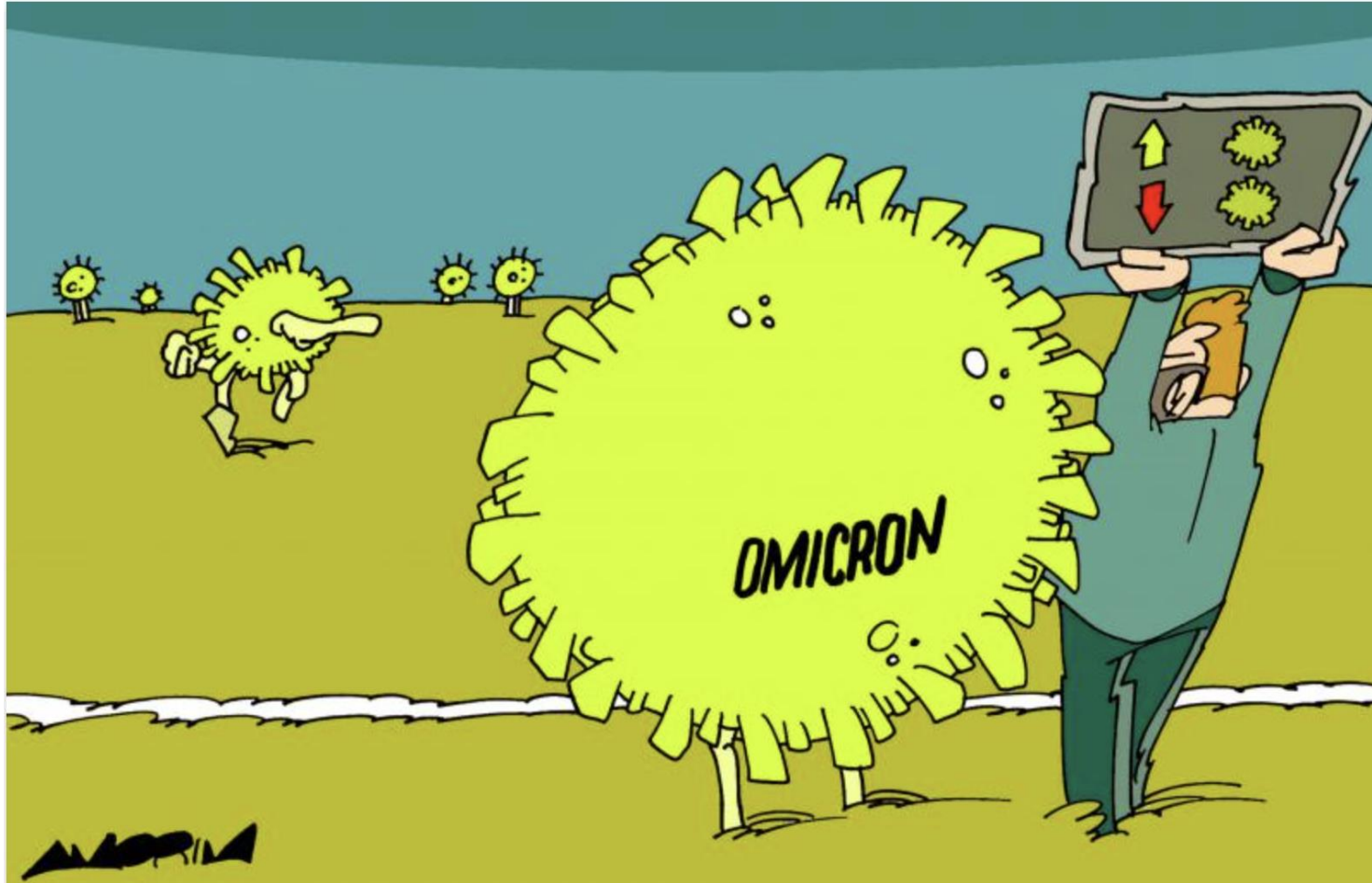
- Antigen on the surface of virus can stimulate immune response. The original antibody will not recognize the virus if there are drastic changes in the particular antigen

COVID-19 : Mutation

- All viruses are subject to change, including COVID-19
- Most of the changes will not affect the features of virus
- However, some changes will, such as the ease of transmission, severity of the disease, the effectiveness of vaccines, drugs, diagnostic tools, and other policies related to public health and society

WHO label	Pango lineage*	Earliest documented samples	Date of designation
Alpha	B.1.1.7	United Kingdom, Sep-2020	18-Dec-2020
Beta	B.1.351	South Africa, May-2020	18-Dec-2020
Gamma	P.1	Brazil, Nov-2020	11-Jan-2021
Delta	B.1.617.2	India, Oct-2020	VOI: 4-Apr-2021 VOC: 11-May-2021
Omicron*	B.1.1.529	Multiple countries, Nov-2021	VUM: 24-Nov-2021 VOC: 26-Nov-2021

What's special about Omicron?



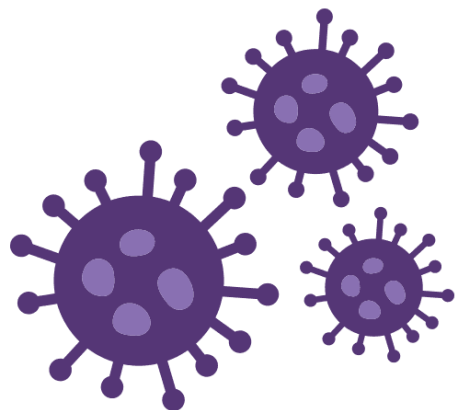
COVID-19 : New Virus Strain

Omicron

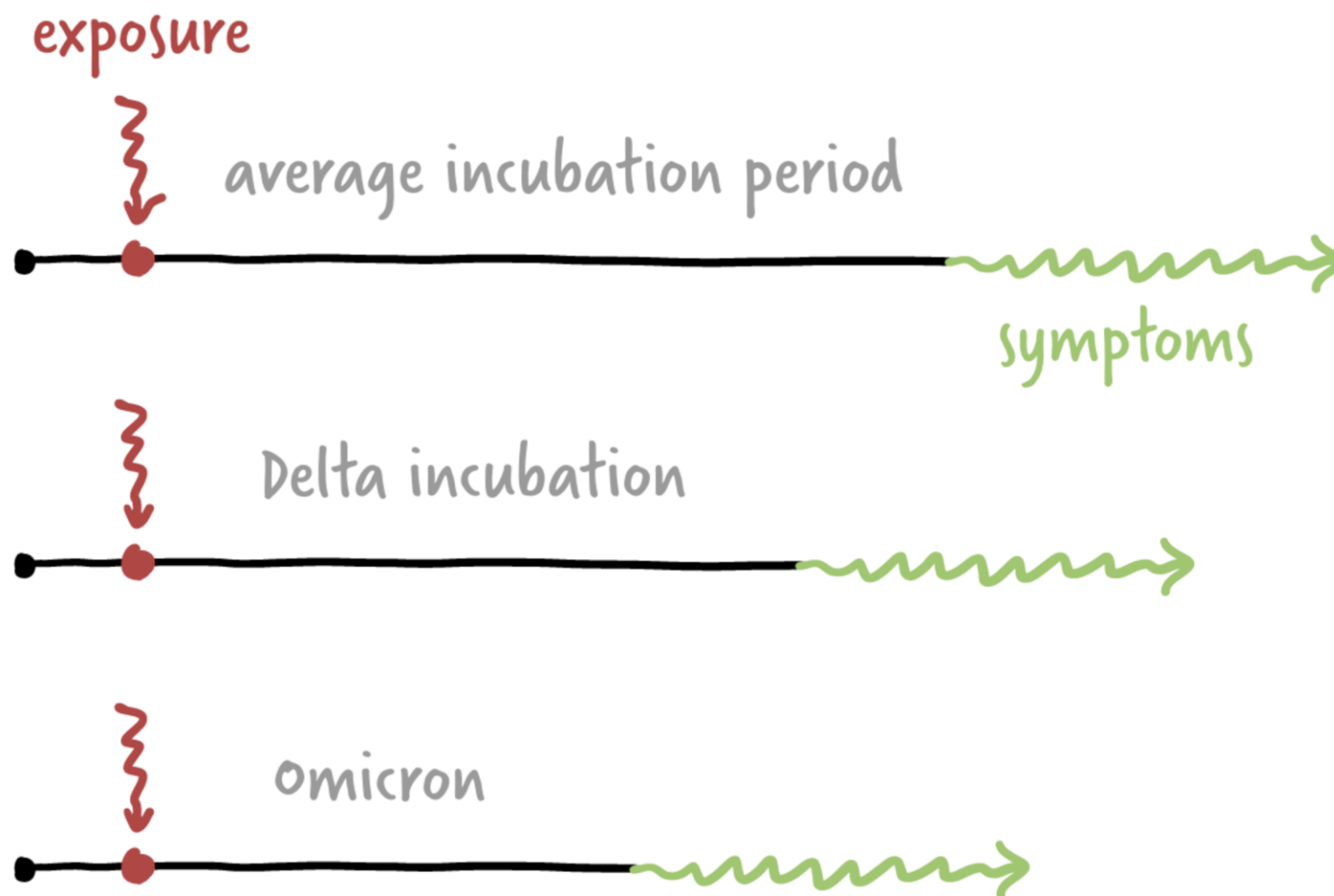
- First detected in South Africa on 24 Nov 2021
- Identified in more than 110 countries
- Faster transmission
- Higher chance of **re-infection and breakthrough infection**



- Shorter incubation period



COVID-19



Frequency of Omicron Symptoms

Courtesy: Zoe Covid Symptom Study

Symptom	Frequency
Runny nose	73%
Headache	68%
Fatigue	64%
Sneezing	60%
Sore throat	60%
Presistent cough	44%
Hoarse Voice	36%
Chills or shivers	30%
Fever	29%
Dizziness	28%
Brain fog	24%
Muscle pains	23%
Loss of smell	19%
Chess pain	19%

COVID-19 : Long-term Effects







- Most people who develop COVID-19 fully recover, but some people experience a variety of mid- and long-term effects (fatigue, breathlessness and cognitive dysfunction like: confusion, forgetfulness, or a lack of mental focus) after they recover from their initial illness
- At this moment, it is still unclear how long the symptoms may last



COVID-19

How to protect yourself and others

The **WHO** advises the following steps to **protect yourself** and **prevent the spread** of COVID-19.

<p>Get vaccinated</p> 	<p>Wear a mask</p> 
<p>Maintain physical distancing</p> 	<p>Ventilate indoor spaces</p> 
<p>Keep good hygiene</p> 	<p>Self-isolate if you develop symptoms</p> 

COVID-19 vaccine: can it beat the virus?



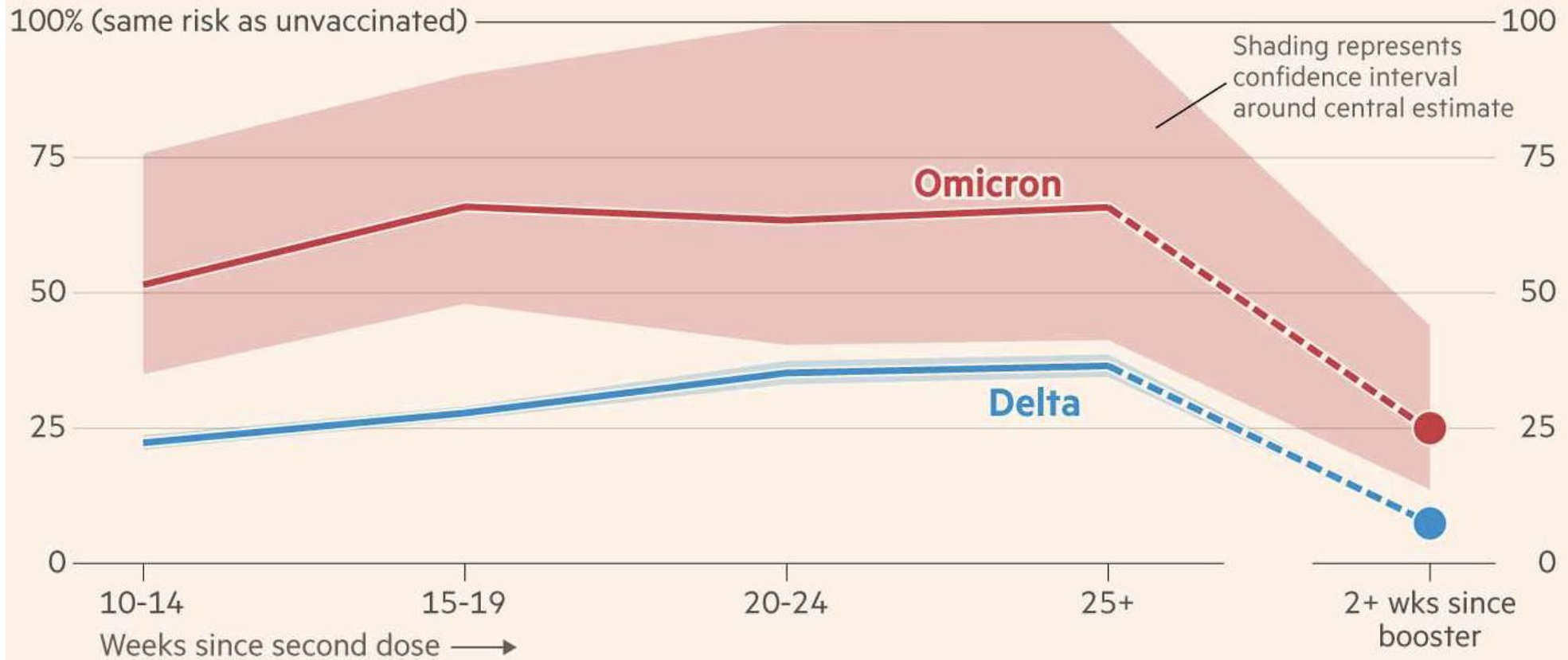
COVID-19 : Vaccination & Variants



- COVID-19 vaccines are very effective in preventing serious disease, hospitalization and death, including those from Omicron
- Booster dose (3rd dose) is required to maintain a good antibody response (especially against Omicron) for many COVID-19 vaccines
- How much COVID-19 vaccines reduce Omicron transmission is not very clear at the moment. Breakthrough infection and asymptomatic infection after vaccination are known to occur

English data shows substantially increased risk of breakthrough infections with Omicron, but boosters push risk back down towards Delta levels

Relative risk of symptomatic infection for someone with the Pfizer/BioNTech vaccine compared with an unvaccinated person



Source: UK Health Security Agency

COVID-19 vaccines provided in HK

復星醫藥/德國藥廠BioNTech
Fosun Pharma/BioNTech

版本日期 Version date :
2021年12月24日
24 December 2021

信使核糖核酸新冠疫苗
COVID-19 mRNA Vaccine

Comirnaty「復必泰」
(BNT 162b2)

接種須知
Vaccination Fact Sheet

科興Sinovac

版本日期 Version date :
2021年12月24日
24 December 2021

新型冠狀病毒滅活疫苗(Vero細胞)
COVID-19 Vaccine (Vero Cell), Inactivated

CoronaVac「克爾來福」

接種須知
Vaccination Fact Sheet

我應接種多少劑新冠疫苗？

How many doses of COVID-19 vaccine are recommended for me?

版本日期 Version date:
2022年6月17日
17 June 2022

請留意政府最新有關疫苗接種安排的公告。

Please refer to the latest announcement by the Government for the vaccination implementation arrangement.

網址 website : www.covidvaccine.gov.hk



如選擇克爾來福 (科興) 疫苗 For CoronaVac (Sinovac) vaccine :

年齡組別 Age group	第一劑 1 st dose	間隔 Interval	第二劑 ⁽²⁾ 2 nd dose ⁽²⁾	間隔 Interval	第三劑 ⁽⁴⁾ 3 rd dose ⁽⁴⁾	間隔 Interval	第四劑 ⁽⁴⁾ 4 th dose ⁽⁴⁾
3 - 11 歲 /years old						不適用 N/A	✗
12 - 17 歲 /years old	●	28日/days	●	● : 90日/days	●	90日/days (只適用於 /only for ★)	★
18 - 59 歲 /years old	★		★ : 28日/days	★	★	▲ : 180日/days ★ : 90日/days	▲ ★
60歲或以上 Aged 60 years or above						90日/days	● ★

如選擇復必泰 (BioNTech) 疫苗 For Comirnaty (BioNTech) vaccine :

年齡組別 Age group	第一劑 1 st dose	間隔 Interval	第二劑 ⁽²⁾ 2 nd dose ⁽²⁾	間隔 Interval	第三劑 ⁽⁴⁾ 3 rd dose ⁽⁴⁾	間隔 Interval	第四劑 ⁽⁴⁾ 4 th dose ⁽⁴⁾
5 - 11 歲 /years old				28日/days (只適用於 /only for ★)	★	不適用 N/A	✗
12 - 17 歲 /years old	●	● : 56日/days ⁽⁶⁾ ★ : 21日/days	●	● : 150日/days ★ : 28日/days	●	90日/days (只適用於 /only for ★)	★
18 - 59 歲 /years old	★		★ : 21日/days	★	● : 90日/days ★ : 28日/days	★	▲ : 180日/days ★ : 90日/days
60歲或以上 Aged 60 years or above		21日/days				90日/days	● ★

● 一般公眾人士
(2019冠狀病毒病康復者除外)
General public (except COVID-19 recovered persons)

★ 免疫力弱人士⁽³⁾
(2019冠狀病毒病康復者除外)
Immunocompromised individuals⁽³⁾
(except COVID-19 recovered persons)

▲ 可選擇接種⁽⁷⁾
(2019冠狀病毒病康復者除外)
May choose to receive⁽⁷⁾
(except COVID-19 recovered persons)

✗ 並未建議接種
Not yet recommended

COVID-19 : Vaccination

***Immunocompromised persons include:**

1. Cancer or hematological malignancy on active immunosuppressive treatment now or in the past 12 months
2. Recipients of solid organ transplant or stem cell transplant on immunosuppressive treatment
3. Severe primary immunodeficiency or on chronic dialysis
4. Advanced or untreated HIV disease
5. On active immunosuppressive drugs, or immunosuppressive chemotherapy/radiotherapy in past 6 months

COVID-19 : Vaccination

Courtesy: Department of Health

BioNTech

Very common

- | Side effects | |
|--|--|
| <ul style="list-style-type: none"> • injection site: pain, swelling • tiredness • headache • muscle pain | <ul style="list-style-type: none"> • chills • joint pain • diarrhoea • fever |
| <p>Some of these side effects were slightly more frequent in adolescents 12 to 15 years than in adults.</p> | |

Common

- | | |
|--|--|
| <ul style="list-style-type: none"> • injection site redness • nausea | <ul style="list-style-type: none"> • vomiting |
|--|--|

SinoVac

Very common

- | Side effects |
|---|
| <ul style="list-style-type: none"> • injection site: pain • headache • fatigue |

Common

- | | |
|---|---|
| <ul style="list-style-type: none"> • injection site swelling, pruritus, erythema, induration • myalgia • nausea • diarrhea • arthralgia • cough | <ul style="list-style-type: none"> • chills • pruritus • loss of appetite • rhinorrhea • sore throat • nasal congestion • abdominal pain |
|---|---|

How to prevent home transmission if tested positive for COVID-19?

1. **Wear surgical mask properly**
2. **Perform hand hygiene frequently**
3. **Maintain good environmental hygiene:** clean and disinfect the home environment daily with 1:49 diluted household bleach. Ensure the shared spaces are well ventilated by keeping windows open
4. **Self-isolation:** stay in your own room with door closed. Avoid face-to-face contact and having meals with other household members

Recommendations on caring children and elderly with COVID-19 at home

- Record the date and time when the child starts to have symptom(s) of infection
- Monitor body temperature, amount of oral intake and frequency of urination and bowel opening of the child
- Be aware of any new symptoms/ symptoms indicating deterioration in the child's condition
- Remember to have adequate rest and sleep
- Carer and the child should stay away from other family members
- Carer must wear a surgical mask and help the child to wear an appropriate-sized mask
- Children with COVID-19 infection should not share personal items with household members
- Clean your home thoroughly daily with 1:49 diluted household bleach
- Maintain good ventilation at home
- **Call an ambulance to the hospital at once** if the child develops breathing difficulty, blue lips, chest pain, fast heartbeat, sudden change of sensorium or confusion, persistent high fever, convulsion, or poor oral intake

Way forward

- Increase vaccination coverage among elderly quickly (especially elderly homes)
- Strengthen medical system capacity and surge capacity
- Promote better public compliance and understanding

References

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<https://www.cdc.gov/coronavirus/index.html>

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<https://www.who.int/zh/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-covid-19>

<https://www.cdc.gov/coronavirus/2019-ncov/your-health/treatments-for-severe-illness.html>

<https://www.coronavirus.gov.hk/chi/covid19.html>