

Updates on Seasonal Influenza Vaccination and Pneumococcal Vaccination

July 2021



衛生署
Department of Health

Outline

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1. Summary of influenza activity in 2021 in HK

- The seasonal influenza activity in HK **remained at a low level** after the end of 2019/20 winter influenza season in mid-Feb 2020
- As of March 2021, all influenza parameters have reached and **remained at a low level**, without signs of an increase in influenza activity nor the arrival of influenza season locally
- In Jan to Mar 2021, the weekly percentage for influenza among respiratory specimens received by the Hospital Authority and the PHLSB remained at a **low level** of 0% to 0.09%.
- Half of the positive influenza detections were **influenza B**, followed by influenza A (H3) and influenza A (H1)

2. Influenza vaccination and the COVID-19 pandemic

- Co-infection of COVID-19 and influenza increases morbidity and mortality, and **influenza vaccination** might **reduce the likelihood of hospitalisation and length of stay**
- The risk groups of COVID-19 and influenza are similar, it is important to ensure that people who are at greater risk of influenza infection are prioritised to receive SIV
- During the COVID-19 pandemic, people who are at greater risk of influenza infection (e.g. **health workers, older adults and pregnant women**) should receive seasonal influenza vaccination.
- Influenza transmission could increase when the non-pharmaceutical interventions and travel restrictions are lifted, leading to **potential co-circulation** of influenza and SARS-CoV-2, with **additional burden** on vulnerable populations and health systems.

3. Priority groups for SIV

In 2021-22, the Scientific Committee on Vaccine Preventable Diseases (SCVPD) recommends the following priority groups for seasonal influenza vaccination :

- 1) **Health Care Workers [including care workers in Residential Care Homes for the Elderly (RCHE) or Residential Care Homes for Persons with Disabilities (RCHD)]**
- 2) **Persons aged 50 years or above**
- 3) **Pregnant women**
- 4) **Residents of Residential Care Homes (such as RCHE or RCHD)**
- 5) **Persons with chronic medical problems**
- 6) **Children aged six months to 11 years**
- 7) **Poultry Workers**
- 8) **Pig Farmers and Pig-slaughtering Industry Personnel**

4. Recommendation on SIV for 2021-22

- **Inactivated influenza vaccine (IIV)**, **live attenuated influenza vaccine (LAIV)** and **recombinant influenza vaccine (RIV)** are recommended for use in Hong Kong by SCVPD
- For the 2021/22 season, **all** available SIV in Hong Kong are **quadrivalent** SIV
- Those **vaccine-naïve children aged below 9 years**, two doses of SIV with an interval of at least four weeks are required

4. Recommendation on SIV for 2021-22

The recommended composition of the 2021-22 SIV by the SCVPD:

Egg-based quadrivalent SIV (e.g. IIV, LAIV)	Recombinant-based quadrivalent SIV (e.g. RIV)
an A/Victoria/2570/2019 (H1N1)pdm09-like virus	an A/Wisconsin/588/2019 (H1N1)pdm09-like virus
an A/Cambodia/e0826360/2020 (H3N2)-like virus	
a B/Washington/02/2019-like virus (B/Victoria lineage)	
a B/Phuket/3073/2013-like virus (B/Yamagata lineage)	

4. Recommendation on SIV for 2021-22

IIVs

Indications

- Recommended for people aged 6 months or above, including healthy people and those with chronic medical problems

Contraindications

- Contraindicated in those with history of **severe allergic reaction** to any vaccine component or a previous dose of any influenza vaccine

Precautions

- Individuals with **mild egg allergy** who are considering influenza vaccination can be given SIVs in primary care settings
- Individuals with a history of **anaphylaxis to egg** should have SIVs administered by health care professionals in appropriate medical facilities with capacity to recognize and manage severe allergic reactions
- Special precautions should be taken for individuals with **bleeding disorders** or **on anticoagulants**
- If individuals suffer from **fever** on the day of vaccination, the vaccination should be deferred till recovery

4. Recommendation on SIV for 2021-22

IIVs

Side Effects

- Occasional soreness, redness or swelling at the injection site
- Fever, muscle pain, and tiredness beginning 6 to 12 hours after vaccination and lasting up to two days
- Immediate severe allergic reactions like hives, swelling of the lips or tongue, and difficulties in breathing are rare

Severe adverse events following immunization (AEFI)

- Influenza vaccination is rarely followed by
 - Guillain-Barré syndrome (1 to 2 cases per million vaccines)
 - Severe allergic reaction (anaphylaxis) (9 in 10 million doses distributed)
- Influenza vaccination does not necessarily have causal relation to these adverse events

4. Recommendation on SIV for 2021-22

LAIV

Indications

- It can be used for people aged **2 to 49 years** except those who are **pregnant, immunocompromised** or with other contraindications

Contraindications

- History of **severe allergic reaction** to any vaccine component or after previous dose of any influenza vaccine
- Concomitant **aspirin or salicylate-containing therapy** in children and adolescents
- Children **2 years through 4 years who have asthma** or who have had a history of wheezing in the past 12 month**

*** The UK recommended the use of IIV instead of LAIV for children with increased wheezing and/or needed additional bronchodilator treatment in previous 72 hours. Also, specialist advice should be sought on giving LAIV for children who require regular oral steroid for maintenance of asthma control or who have previously required intensive care for asthmatic attack. Canada recommended that individuals with severe asthma (currently on oral or high-dose inhaled glucocorticosteroids or active wheezing) or those with medically attended wheezing in the 7 days prior to vaccination should not use LAIV.*

4. Recommendation on SIV for 2021-22

LAIV

Contraindications (cont'd)

- Children* and adults who are **immunocompromised due to any cause**
- Close contacts and caregivers of severely immunosuppressed persons who require a protected environment
- **Pregnant women**
- Persons with receipt of **influenza antiviral medication** within previous 48 hours

Precautions

- Individuals with **mild egg allergy** who are considering an influenza vaccination can be given SIVs in primary care settings
- Individuals with a history of **anaphylaxis to egg** should have SIV administered by health care professionals in appropriate medical facilities with capacity to recognize and manage severe allergic reactions

**According to Canadian guidelines, intramuscular influenza vaccination is the standard for children living with HIV. LAIV may be considered as an option for children 2-17 years of age with stable HIV infection on highly active antiretroviral therapy (HAART) and adequate immune function, and the decision should be made on a case-by-case basis.*

4. Recommendation on SIV for 2021-22

LAIV

Possible Side Effects

- **Nasal congestion or runny nose** (in all ages)
- **Fever** (in children) and sore throat (in adults)
- **Increased risk of wheezing** among children aged below 5 years with recurrent wheezing / persons of any age with asthma

Administration with other vaccines

- With other **live** vaccines: LAIV should be administered on the **same day or at least 4 weeks apart**
- With other **inactivated** vaccines: LAIV can be administered simultaneously or at any interval

4. Recommendation on SIV for 2021-22

RIV

- RIV contains haemagglutinin (a surface protein of influenza virus) that is produced by recombinant technology, and **does not require egg** in the production process.

Indications

- RIV can be used for people aged **18 years or above**

Contraindications

- Hypersensitivity to any vaccine component of the RIV.

4. Recommendation on SIV for 2021-22

RIV

Precautions

- Special precautions should be taken for individuals with bleeding disorders or on anticoagulants
- If individuals suffer from fever on the day of vaccination, the vaccination should be deferred till recovery

Possible Side Effects

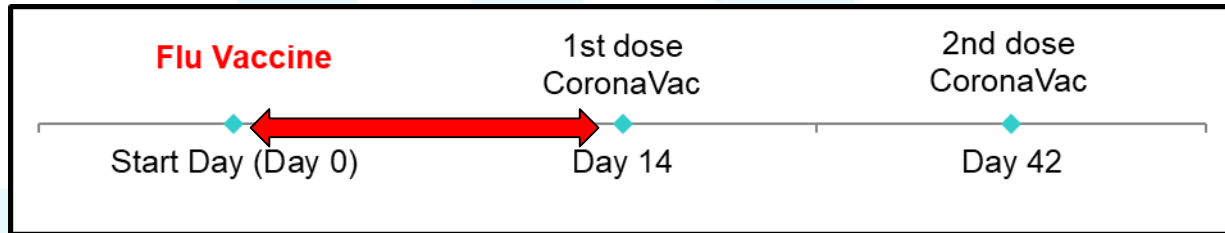
- Injection-site reactions such as tenderness and pain
- Headache, fatigue and muscle pain and joint pain

4. Recommendation on SIV for 2021-22

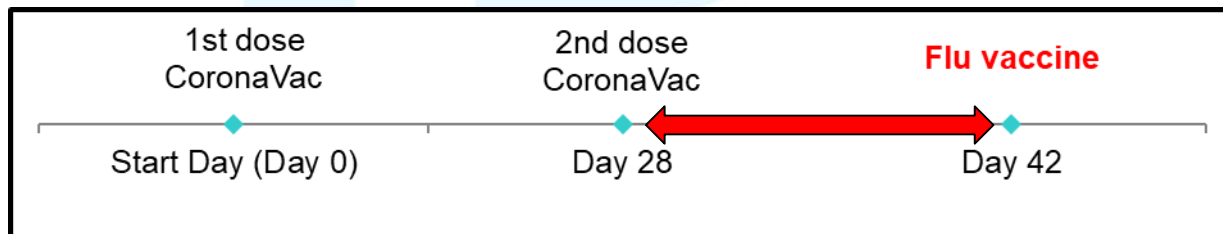
Injection interval between influenza vaccines and COVID-19 vaccines

SCVPD suggested to have an interval of **at least 14 days** between administration of SIV and COVID-19 vaccines (BNT162b2 or CoronaVac). This would allow clearer ascertainment of potential adverse events

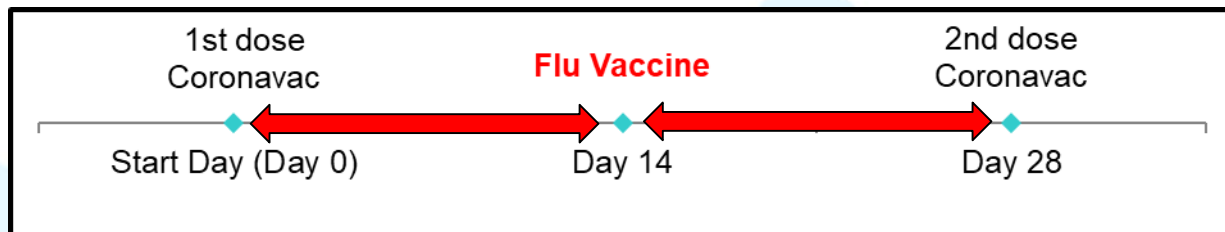
Example 1



Example 2



Example 3



5. Recommendation on pneumococcal vaccination

SCVPD's Recommendation on use of pneumococcal vaccines for high-risk individuals in July 2016

	Age 65 years and above
Without high risk conditions [^]	Either a single dose of PCV13 or a single dose of 23vPPV
Individuals with high risk conditions [^] who have not received any pneumococcal vaccines	One dose of PCV13 followed by one dose of 23vPPV 1 year later
Individuals with high risk conditions [^] who have received 23vPPV	Single dose of PCV13 1 year after previous 23vPPV vaccination
Individuals with high risk conditions [^] who have received PCV13	Single dose of 23vPPV 1 year after previous PCV13 vaccination

5. Recommendation on pneumococcal vaccination

^High risk conditions include the following:

- (a) History of invasive pneumococcal disease
- (b) Immunocompromised states:
 - Asplenia, HIV/AIDS, primary immunodeficiency
 - Immunodeficiencies related to malignancy and transplantation
 - Immunodeficiencies related to use of immunosuppressive drugs / systemic steroid
- (c) Chronic disease:
 - Chronic cardiac, pulmonary, liver or renal disease
 - Diabetes mellitus or Cerebrospinal fluid leakage
- (d) With cochlear implants

(Essential hypertension per se is not considered as a high risk condition)

Different factors such as age and clinical condition may affect the risk of pneumococcal disease. Patients with high-risk conditions should discuss with their attending doctors on the most appropriate vaccination regimen.

5. Recommendation on pneumococcal vaccination

Under the Government Vaccination Programme and Vaccination Subsidy Scheme, aside from the above list of high-risk conditions, elderly 65 years or above with chronic metabolic diseases, obesity (BMI 30 or above), chronic neurological conditions or those with financial difficulties are eligible for free/subsidised pneumococcal vaccination.

6. More Information

- CHP website
<https://www.chp.gov.hk/en/features/17980.html>
- Recommendations on Seasonal Influenza Vaccination for the 2021-22 Season in Hong Kong (April 2021) of the Scientific Committee on Vaccine Preventable Diseases
https://www.chp.gov.hk/files/pdf/recommendations_on_siv_for_the_2021_april2021.pdf
- Updated Recommendations on the Use of Pneumococcal Vaccines for High-risk Individuals (July 2016) of the Scientific Committee on Vaccine Preventable Diseases
http://www.chp.gov.hk/files/pdf/updated_recommendations_on_the_use_of_pneumococcal_vaccines_amended_120116_clean_2.pdf
- Hong Kong Reference Framework for Preventive Care for Children in Primary Care Settings – Module on Immunisation
https://www.fhb.gov.hk/pho/rfs/english/reference_framework/pre_care_for_child.html

6. More Information

項目管理及疫苗計劃科

Programme Management and Vaccination Division

電話 : 2125 2125
Phone

傳真 : 2713 9576
Fax

電郵 : vacs@dh.gov.hk
Email

地址 : 九龍紅磡德豐街18-22號海濱廣場二座3樓
Address : 3/F, The HarbourFront Tower 2, 18-22 Tak Fung Street, Hung Hom, Kowloon

網站 : <https://www.chp.gov.hk/en/features/17980.html>
Website

Thank You