

**Residential Care Home Vaccination Programme 2016/17**  
**Frequently Asked Question**  
**(Seasonal Influenza and Pneumococcal Vaccination)**

**What is influenza?**

Influenza is an infectious viral disease. It can be caused by various types of influenza viruses. In Hong Kong, the two subtypes of influenza A virus, H1N1 and H3N2, and influenza B virus, are most commonly seen. Influenza occurs in Hong Kong throughout the year, but is usually more common in periods from January to March and from July to August. The virus mainly spreads by respiratory droplets. The disease is characterised by fever, sore throat, cough, headache, muscle aches, runny nose and general tiredness. It is usually self-limiting with recovery in two to seven days. However, if persons with weakened immunity and elderly persons get infected, it can be a serious illness and may be complicated by bronchitis, pneumonia or even death in the most serious cases. Serious influenza infection can also occur in healthy individuals.

**Why is seasonal influenza vaccination important?**

Seasonal influenza vaccination is one of the effective means to prevent seasonal influenza and its complications together with reduction in influenza related hospitalisation and death.

**Who should not receive seasonal influenza vaccination?**

People who are allergic to a previous dose of inactivated influenza vaccine or other vaccine components **For example, Fluarix<sup>TM</sup> Tetra contains Gentamicin** are not suitable to have inactivated seasonal influenza vaccination. For vaccine components, please refer to drug insert. Individuals with mild egg allergy who are considering an influenza vaccination can be given inactivated influenza vaccine in primary care. Individuals with diagnosed or suspected severe egg allergy should be seen by an allergist/immunologist for evaluation of egg allergy and for administration of inactivated influenza vaccine if clinically indicated. Those with bleeding disorders or on anticoagulants should consult their doctors for advice. If an individual suffers from fever on the day of vaccination, the vaccination should be deferred till recovery.

**Is it necessary to get vaccinated against seasonal influenza every year?**

Yes. The circulating seasonal influenza strains may change from time to time. In accordance with the circulating strains, the seasonal influenza vaccine composition is updated every year to enhance protection. The immunity built up in a vaccinated

person in the prior season will decrease over time and may become too low to provide protection in next season. In addition, the vaccine compositions of 2016/17 seasonal influenza vaccine are different from those in 2015/16.

**How do seasonal influenza vaccines work?**

The seasonal influenza vaccine induces development of antibodies against influenza virus infection in the body.

**Does the seasonal influenza vaccine work right away?**

No. It takes about two weeks after vaccination for antibodies to develop in the body and provide protection against influenza virus infection. For prevention against influenza, vaccinated individuals should maintain good personal and environmental hygiene practices, balanced diet, regular exercise, adequate rest, and no smoking.

**How much protection does the seasonal influenza vaccine provide?**

When the vaccine strains closely match the circulating influenza viruses, efficacy of inactivated influenza vaccine in individuals younger than 65 years of age typically range from 70% to 90%. For prevention against influenza, vaccinated individuals should maintain good personal and environmental hygiene practices, balanced diet, regular exercise, adequate rest, and no smoking.

**Does seasonal influenza vaccine cause influenza?**

The viruses in the inactivated influenza vaccine are dead viruses. Therefore, it cannot cause influenza. However, some people develop side effects after vaccination.

**Does the 2016/17 seasonal influenza vaccine contain human swine influenza virus?**

As recommended by the World Health Organization, the 2016/17 seasonal influenza vaccine contains A/California/7/2009 (H1N1)pdm09-like virus (human swine influenza virus), A/Hong Kong/4801/2014 (H3N2)-like virus and B/Brisbane/60/2008-like virus. If quadrivalent influenza vaccine is being used, it shall contain the above three viruses and a B/Phuket/3073/2013-like virus.

**Is seasonal influenza vaccine safe? What are the possible side effects of the inactivated seasonal influenza vaccine?**

Inactivated seasonal influenza vaccine is very safe and usually well tolerated apart from occasional soreness, redness or swelling at the injection site. Some recipients may experience fever, muscle and joint pains, and tiredness beginning 6 to 12 hours after vaccination and lasting up to two days. If fever or discomforts persist, please

consult a doctor. Immediate severe allergic reactions like hives, swelling of the lips or tongue, and difficulties in breathing are rare and require emergency consultation.

Influenza vaccination may be rarely followed by serious adverse events such as Guillain-Barre syndrome (about 1 case per million vaccinees), meningitis or encephalopathy (1 in 3 million doses distributed) and severe allergic reaction (anaphylaxis) (9 in 10 million doses distributed). However, influenza vaccination may not necessarily have causal relations with these adverse events. Studies have shown that the risk of Guillain-Barré Syndrome after influenza infection (17.20 per million) is much higher than after influenza vaccination (1.03 per million).

### **What is Guillain-Barré syndrome? Can influenza vaccination cause Guillain-Barré syndrome?**

Guillain-Barré Syndrome (GBS) is a rare neurological disorder causing paralysis and even respiratory difficulties. Most people recover completely but some have chronic weakness. GBS can also develop following a variety of infections, including influenza. So far, no clear association has been found between GBS with seasonal influenza vaccine.

### **Can individual receive influenza vaccination if they are unwell?**

If an individual suffers from fever on the day of vaccination, the vaccination should be deferred till recovery.

### **What is pneumococcal infection?**

Pneumococcal infection represents a wide range of diseases caused by the bacterium *Streptococcus pneumoniae* (or more commonly referred as pneumococcus). While pneumococcus is a common cause of mild illnesses such as sinus or middle ear infections, it may also cause severe or even life-threatening invasive pneumococcal diseases (IPD) such as pneumonia, sepsis, and meningitis. The outcomes for IPD are usually more severe among elderly persons.

### **How does individual acquire pneumococcal infections? What is the route of transmission for pneumococci?**

Pneumococci are carried on human bodies. They are present in the respiratory tracts even in some healthy carriers. The bacteria can be transmitted via spread of droplet, direct oral contact or indirect contact with articles soiled with respiratory discharges.

**Why is it necessary for elderly to receive both influenza vaccine and 23-valent pneumococcal polysaccharide vaccine (23vPPV)?**

Secondary bacterial pneumonia is an important cause of morbidity and mortality for those infected with influenza. Data from a local study shows that dual vaccination with influenza vaccine and 23-valent pneumococcal polysaccharide vaccine (23vPPV) can lower the risk of hospitalisation and mortality among elderly people.

**Who are not suitable to receive 23-valent pneumococcal polysaccharide vaccine (23vPPV)?**

Severe allergic reaction following a prior dose of 23-valent pneumococcal polysaccharide vaccine (23vPPV) or to the vaccine component is a contraindication to further doses of vaccine.

**Can 23-valent pneumococcal polysaccharide vaccine (23vPPV) be given prior to / after certain medical procedures?**

For individuals who will undergo elective splenectomy, 23-valent pneumococcal polysaccharide vaccine (23vPPV) should be given at least 2 weeks before the procedures if possible. 23-valent pneumococcal polysaccharide vaccine (23vPPV) should not be given during chemotherapy or radiotherapy for cancer.

**What are the adverse events associated with 23-valent pneumococcal polysaccharide vaccine (23vPPV)?**

23-valent pneumococcal polysaccharide vaccine (23vPPV) have been demonstrated to be safe. Common adverse reactions include slight swelling and tenderness at the injection site shortly following injection. Local reactions are more severe following a second dose but most resolve within a few days without treatment.

**Can individual receive 23-valent pneumococcal polysaccharide vaccine (23vPPV) if they are not feeling well on the day of vaccination?**

Minor illnesses such as upper respiratory tract infections are not contraindications to receive 23-valent pneumococcal polysaccharide vaccine (23vPPV). Vaccination may also be deferred until symptoms subside in case of any worry.