

#### **FEATURE IN FOCUS**

# Prevention of infectious diseases by wearing surgical masks

Reported by Mr Anthony NG, Senior Nursing Officer, Ms Jane LEUNG, Advanced Practice Nurse and Dr Leo LUI, Associate Consultant, Infection Control Branch, CHP.

Many respiratory tract infections (including influenza) are mainly spread by droplets produced when people cough, sneeze or talk. These infections have the potential to cause serious illnesses especially in high-risk individuals. In addition to adopting a healthy lifestyle and practising basic infection control measures such as hand hygiene, cough etiquette and environmental cleanliness, proper use of surgical mask is also an effective means to protect individuals and the public against respiratory infections.

#### What is face mask?

Face mask provides a physical barrier to fluids and large particle droplets. Surgical mask is a type of face mask commonly used. When used properly, it can prevent infectious droplets containing respiratory pathogens from entering our mouth and nose. Individuals should wear a surgical mask when (1) they have respiratory infection; (2) need to care for a person with respiratory infection; or (3) visiting clinics or hospitals during peak season of influenza. Individuals at high risk of having infection-related complications may also consider putting on surgical masks when visiting crowded or poorly ventilated public places.

Most surgical masks adopt a three-layer design (Figure 1) which includes an outer fluid-repelling layer, a middle layer serving as a barrier to germs, and an inner moisture-absorbing layer. Wearer should follow the manufacturers' recommendations (if available) when using surgical mask, including proper storage and procedures of putting on surgical mask.

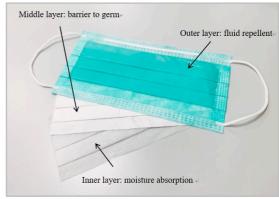


Figure 1 - Illustration of three-layer design of surgical mask.

#### Points to note on wearing and removing a surgical mask:

- ♦ Choose the appropriate mask size. Child size is available for selection as indicated;
- ◆ Perform hand hygiene before putting on a mask;
- ◆ The mask should fit snugly over the face;
- ♦ Avoid touching the mask after wearing. Otherwise, should perform hand hygiene before and after touching the mask.

#### Putting on the mask:

- ◆ Determine the orientation of the mask. In general, the coloured side should face outwards with the metallic strip on top (Step I). For masks without a coloured side, the side with folds facing downwards should face outwards, with the metallic strip on top.
- ◆ For tie-on surgical mask, secure the upper tie at the crown of head. Then secure the lower tie at the nape (Step 2). For ear-loops type, position the elastic bands around both ears.
- ◆ Extend the mask to fully cover the mouth, nose and chin (Step 3).
- ◆ Mould the metallic strip over nose bridge and the mask should fit snugly over the face (Step 4).



Figure 2 - How to wear a surgical mask. (Source: The Centre for Health Protection of the Department of Health. Available from <a href="https://www.chp.gov.hk/files/pdf/use\_mask\_properly.pdf">https://www.chp.gov.hk/files/pdf/use\_mask\_properly.pdf</a>.



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#### Removing the mask:

- ♦ For tie-on surgical mask, unfasten the tie at the nape first; then unfasten the tie at the crown of head (Step 5). For ear-loops type, hold both ear loops and lift the mask gently off the face. Avoid touching the outside of the mask during removal as it could be contaminated.
- After taking off the surgical mask, discard in a lidded rubbish bin and perform hand hygiene immediately.
- Surgical mask should be changed whenever damaged or soiled and at least daily.

(Video available from <a href="https://www.youtube.com/watch?v=qNshOyB0ocw">https://www.youtube.com/watch?v=qNshOyB0ocw</a>.



### **Summary**

Proper wearing of surgical mask can protect individuals and reduce the risk of acquiring respiratory tract infections. Apart from that, the following preventive measures should also be emphasised:

- Perform hand hygiene frequently and properly especially before touching eyes, nose and mouth;
- Maintain respiratory etiquette/cough manners;
- If develop symptoms of respiratory infection, put on a surgical mask and seek early medical attention;
- Stay home to rest and avoid unnecessary social contact until recovery;
- Persons at a high risk of having infection-related complications, e.g. pregnant women or persons with chronic illnesses are advised to receive influenza vaccination before start of the flu season to prevent seasonal influenza infection. It takes about two weeks for antibodies to develop in the body after vaccination. Medical advice should be sought promptly if influenza-like symptoms develop so that appropriate treatment can be initiated as early as possible to prevent potential complications.

# 2019/20 Seasonal Influenza Vaccination Programmes

Reported by Dr Heather CHOY, Medical and Health Officer, Emergency Response and Programme Management Branch, CHP.

Vaccination is one of the effective means to prevent seasonal influenza and its complications, as well as reduce influenza-related hospitalisation and death. The Department of Health (DH) continues to launch various vaccination programmes in October 2019 to facilitate the public to receive seasonal influenza vaccination (SIV).

In 2018/19, DH introduced the School Outreach Vaccination Pilot Programme and the enhanced Vaccination Subsidy Scheme School Outreach. Over 308 000 children had received SIV under various vaccination programmes, representing a 46% coverage rate and a 103.5% increase in the number of recipients as compared to 2017/18. Kindergartens and child care centres (KGs/CCCs) and primary schools that organised outreach vaccination had a lower risk of influenza-like illness (ILI) outbreak.

With experience and encouraging result in the school outreach programmes in 2018/19, the Government has launched the 2019/20 SIV School Outreach (Free of Charge) to cover more primary schools and to extend a pilot to KGs/ CCCs in 2019/20. Government outreach teams or Public-Private-Partnership teams will reach out to provide free SIV to students of participating schools. As at November 2019, more than 430 primary schools and over 700 KGs/CCCs have enrolled. As for schools not joining the "Free of Charge" programme, they may choose to join the Vaccination Subsidy Scheme (VSS) School Figure 1 - Let's get influenza vaccination. Protect yourself Outreach (Extra Charge Allowed), in which school staff and students' family and others. members can also join the activity.



In addition, the Government also expanded SIV to cover residents and healthcare workers in residential child care centres under the Residential Care Home Vaccination Programme (RVP). For children that would not receive vaccination at schools or care homes, parents may also arrange a subsidised vaccination in clinics of private doctors enrolled in VSS.

For other target groups, Government Vaccination Programme (GVP) continues to provide free SIV to eligible Hong Kong residents at designated public clinics. Under VSS, eligible persons of age 50 years or above, pregnant women, children, persons with intellectual disability and persons receiving disability allowance, can receive subsidised SIV in enrolled private doctor's clinic.

DH will continue to work closely with stakeholders, including health care sectors, community partners and education sectors to promote SIV to target groups. Publicity through various channels, including TV and radio, websites/Facebook and other social media will also be conducted to encourage the public to receive SIV.

Vaccination

Please scan the QR code to visit the webpage of the Centre for Health Protection of DH for more information on SIV programmes.

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## **NEWS IN BRIEF**

## A sporadic case of psittacosis

In November 2019, the Centre for Health Protection of the Department of Health recorded a sporadic case of psittacosis affecting a 59-year-old man with underlying illnesses. He had presented with fever and headache since November 16 and was admitted to a public hospital on November 26. The clinical diagnosis was pneumonia. He was treated with antibiotics. His nasopharyngeal aspirate collected on November 27 tested positive for *Chlamydophila psittaci* DNA. He remained stable and was discharged on December 3. He lived in Shenzhen and recalled history of contact with live poultries in Huizhou during the incubation period. His home contact remained asymptomatic.

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