UNMASKING ‘THE MASK’

The 2019-nCoV outbreak has raised many questions about the safety and use of masks. Dr Putta Subramanyam Navya, Infectious Diseases, Ng Teng Fong General Hospital, addresses five common ones.

**Q: How do surgical masks work to protect me?**

Surgical masks are designed to keep out droplets, splashes, sprays or splatter that may contain germs from reaching your mouth and nose. It also reduces the risk of your own saliva and respiratory secretions from reaching others. It is designed with several layers, typically three, to reduce the spread of germs. There is a fluid repellant outer layer; a middle filtering layer that acts as a barrier to germs; and an inner layer which absorbs moisture.

**Q: How long can I use my surgical mask for? And can I reuse them?**

A surgical mask can be worn continuously for up to four hours. A mask’s filtration and protective efficiency becomes compromised when it is wet, torn, dirty or dislodged. It should not dangle or hang around the neck. Do not reuse your mask. Once a mask is used, the mask is considered contaminated. A mask is only effective if worn properly. It should be worn with its coloured side (with downward-facing folds) outwards to keep fluids out. The metallic strip should press against the nose. Do not wear the mask inside out as the inner layer is designed to absorb moisture.

**Q: Does wearing multiple masks give added protection?**

No. There is no data to support this.

**Q: How do I know if my surgical mask is effective and meets infection control standards?**

The quality should be compliant with the American Society of Testing and Materials (ASTM) specifications and have a Bacterial Filtration Efficiency (BFE) of 80%. BFE is a measure of how well a mask filters out bacteria. Masks should meet international standards for skin sensitivity and contain no harmful material.

**Q: Will wearing a cloth mask/handkerchief over my face protect me from infection?**

No. Cloth masks and handkerchiefs do not confer the same level of protection. The materials in surgical masks are specially designed and tested. Fabric does not offer effective filtration from germs.