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Make your own mask: Hong Kong scientists reveal temporary solution to shortage

3-4 minutes

Lam said he was in touch with some schools to explore whether students studying at home could help produce more masks, adding that Professor Yuen Kwok-yung, the city's top microbiologist tackling the coronavirus, had also endorsed the use of such masks.

Releasing the procedure on Friday, the hospital said it hoped the home-made gear could serve as a temporary measure for those without surgical masks, easing the pressure on the city's remaining stock.

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Joe Fan King-man, the institution's assistant hospital chief executive, said the home-made masks had undergone laboratory tests by City University and were proven to have achieved 80 to 90 per cent of the function of regular surgical masks in terms of their filtration of aerosol and droplets.



Experts devise do-it-yourself face masks to help people battle coronavirus

However, Fan said they did not serve as a permanent substitute for surgical masks.

“The home-made masks can only act as an alternative for those who don’t have any gear but need to protect themselves from infection. They can never be a substitute or replacement for surgical masks,” he said.

The Consumer Council is a partner of the project.

How to make your own masks and protective shield at home:



The home-made mask and shield when worn. Photo: YouTube

Required items: kitchen roll, strong tissue paper, elastic

bands, a hole punch, paper tape, scissors, plastic-coated steel wire, a pair of glasses, plastic file folders and binder clips.



A hole punch, scissors and tape are required. Photo: YouTube

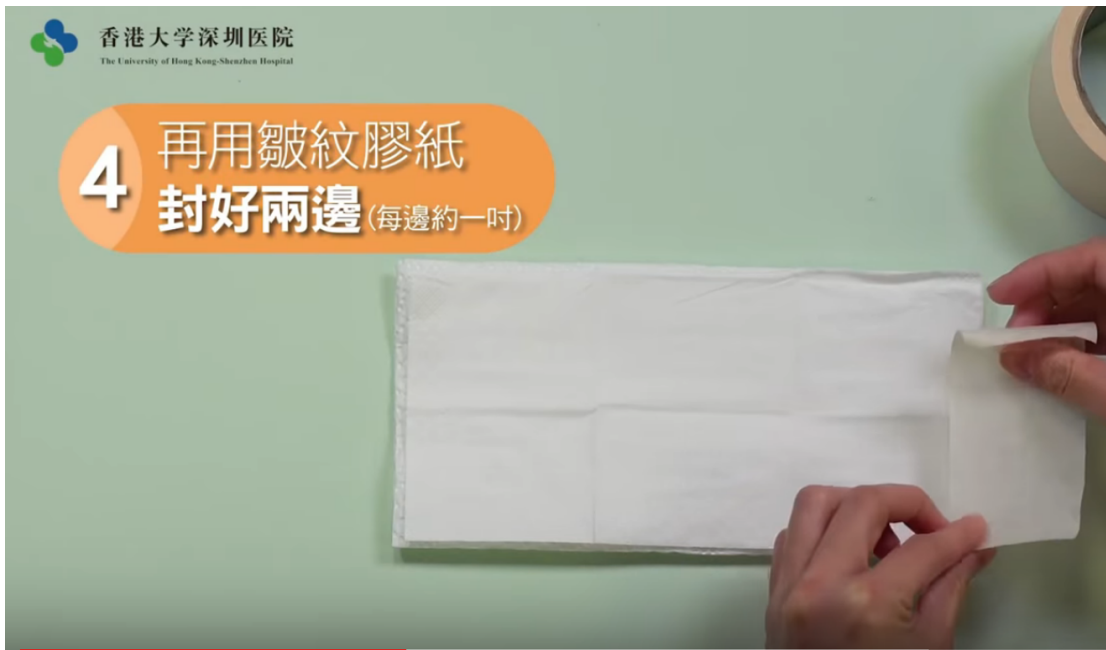
Preparation:

For the mask:

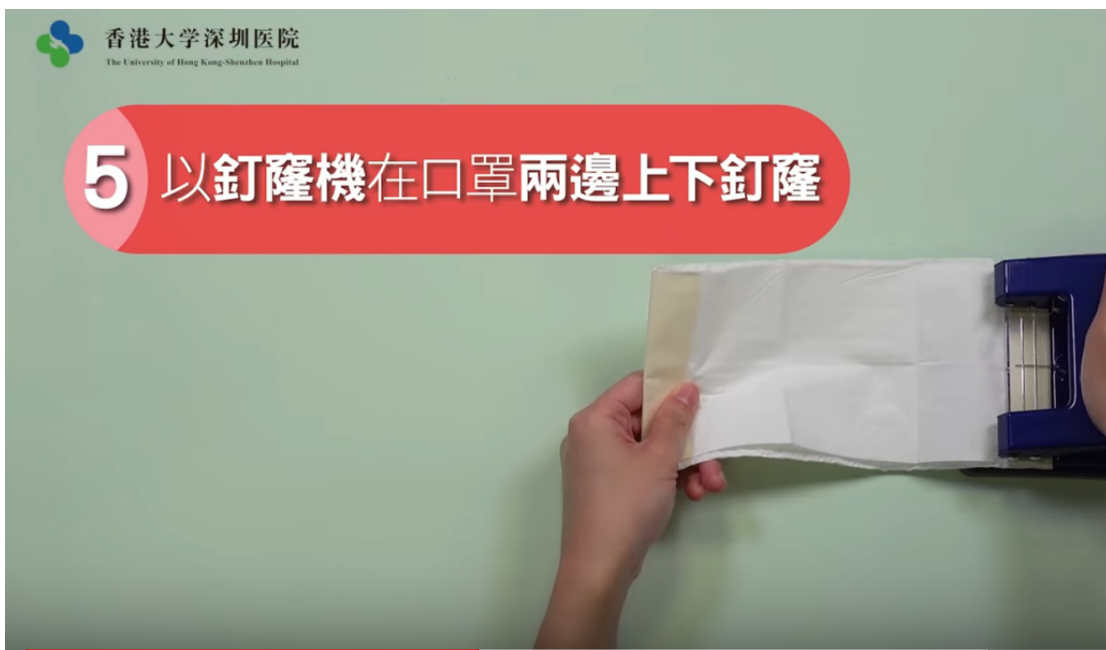
- Wash your hands thoroughly with soap and clean your items
- Put one piece of kitchen roll, with proper hygiene certification, on top of another
- Place a piece of tissue paper, which will act as the bottom layer of the mask, on top of the two pieces of kitchen roll
- Cut the stack of paper into two
- Use the paper tape to seal off the two sides of the mask
- Make two holes at each sealed side with the punch
- Attach the metallic wire with paper tape to the top edge of the

mask to make the nose bridge wire

- Tie four rubber bands through the holes on the mask's sides



Two pieces of kitchen roll are used. Photo: YouTube



Two holes are punched at each sealed side. Photo: YouTube

Rubber bands are put through the holes on the mask's sides. Photo:

YouTube

For the protective shield:

- Cut the file folder into two pieces
- Attach one piece on the edge of the glasses with binder clips
- The shield can be reused after disinfection for each usage

Note: The hospital said other materials such as cling film, air conditioner filter paper, and cotton cloth were not suitable for making the masks.