



# VIRUS BLOCK

They might not make a great fashion statement but in this season of swine flu, face masks are certainly the most visible accessory. A look at how they work. Or do they, asks VIDYA KRISHNAN

### Surgical Masks

Usually worn by healthcare workers, these masks have three layers. They are made for single use and do not cover the mouth and nose firmly. They are meant specifically to prevent the wearer from spreading droplet infections. Because the influenza virus is transmitted through droplets of water, rather than through the air, placing a protective barrier over your face can block its entry into your mouth or nose. Is ineffective when worn for too long. Cost: Rs 8 a piece

### N95 or High efficiency particulate air filter masks

The N95s fit tightly against the wearer's face. They get the name because they offer "95 per cent protection" against particles that are more than 0.3 microns in diameter. Though they can be used for up to eight hours, those who use it say they can be uncomfortable, especially in the hot, sultry weather conditions that prevail in India. These masks are also single use. Cost: Rs 1,600 for a pack of 10

### How they work

While surgical masks are commonly used, experts consider the N95s to be a safer option. H1N1 spreads through droplets. When a person sneezes, the size of droplets varies—from very large ones to tiny ones. Though the H1N1 virus, which causes the flu, is much smaller than 0.3 microns (the size of the filter pore), it is carried in a droplet that makes it bigger and is usually stopped by an N95 mask. says Dr N.P. Singh, professor of medicine, Maulana Azad Medical College. "The masks are, however, no guarantee that the infection will be contained," he says. Particles greater than 5 microns are heavy and usually sag down. Those that are very small remain suspended in the air. Particles ranging from 1-5 microns in diameter are the ones that enter the upper airways and cause infections.

### Wear it right

- If you choose to use a mask, make sure you change it every eight hours—or every time it gets moist—for it to remain effective.
- If you need to take your mask off, say, to eat, then fold it and put it in a paper bag.
- It's important to make sure your mask fits correctly; this means it needs to cover your nose and your mouth, and should be secured firmly at the back of your head.

### Masks in India

Though masks do limit chances of infection, doctors say the idea may not be feasible in the Indian context. "It is more sensible to make the patient wear masks. Also, most people will not be able to afford a mask that they have to change thrice a day. Plus, there is no guarantee that a mask will provide fool-proof protection. If the wearer has not washed his hands and touches the mask, it will get infected. So this is not a solution, especially in the Indian context," says Dr Himanshu Garg, Pulmonary medicine, Max Healthcare.