

Very low cost, disposable face shield: ViroShield

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As it is established that infection of SARS Cov-2 is disseminated through a rapid human to human transmission which makes it unique than the other members of Coronavirus family, particularly SARS Cov. More importantly, using face mask alone offers reasonable protection but certainly not complete, as the infection may also happen through eyes. Covering whole face with face shield not only offers protection to eyes but also restricts the habit of frequent touching of face. India which is struggling with the mammoth health care challenge i.e. Covid19, requires low cost personal protection gears. In our attempt, Department of Biotechnology, Motilal Nehru National Institute of Technology Allahabad aimed to make a low cost, disposable face shield which is suitable to health care workers in ICU as well as diagnostic set up. Besides, it can also be used by police and sanitary workers particularly in areas designated as hotspots and/or red zones. The same will also be distributed among our institutional staff handling cleaning and sanitary work. Their safety and protection is of utmost priority to us.

The ViroShield is a 'one size fits all' sort of, made up of transparency sheet, EPE foam sheet *with a total cost of 7 rupees per piece*. This is optimally designed for any faces with or without spectacles. More importantly, in a low threat zone, it can be reused. However, in a high threat zone such as hotspots/ICU, they should be used once. The very low cost of ViroShield favors its one time use in our limited resources. It is different from other available/ recently developed face shield, as they are relatively costlier. Moreover, their parts are being re-used which is certainly not advisable in an infection like SARS Cov-2.