

## Contemporary measures to combat mask-induced fogging during the COVID-19 pandemic

Dear Editor,

Since the inception of the COVID-19 (coronavirus disease 2019) pandemic, new norms such as social distancing, hand sanitization, and use of face masks have become an integral part to safeguard ourselves. The World Health Organization announced the use of face masks as an essential measure to combat the spread of the disease. Regular and continuous use of face masks has been a big challenge. A major difficulty encountered by all the health care workers, including ophthalmologists, and patients has been the constant fogging of spectacles while wearing masks. This letter highlights a few of the contemporary and innovative measures to combat this common problem, which, we believe, will be beneficial for the community as a whole.

First, we should choose masks that snugly fit over our nasal bridge. A tight fit between the nose and the mask can also be created by pinching the white strip on the masks. Adhesive tapes can be used in different ways to prevent fogging. It can either be applied along the upper margin of the mask with half of its width attached to the outer surface of the mask and the remaining half over the skin beneath the eyes,<sup>[1]</sup> or it can be applied in an inverted V pattern with ends from the inferomedial orbital wall running over the surgical mask.<sup>[2]</sup> A folded tissue paper over the nasal bridge placed under the mask can also prevent droplets from condensing over the glass. The use of double masks with the outer mask tied at a lower level than the inner mask also works well.

An innovative do-it-yourself model consists of a noseband made with a metal wire and a sponge.<sup>[3]</sup> Application of diluted liquid soap or shampoo for 20 seconds followed by wiping with a cloth, commonly used by snorkelers, can also be tried. This leaves a thin film over the glass and prevents fogging. Other options include application of commercially available antifog

solutions or Sterillium.<sup>[4,5]</sup> These can also help in preventing fogging of the eyepiece in slit lamps and operating microscopes. Furthermore, polycarbonate lenses can be helpful as they defog faster than glass lenses.

These simple measures if used aptly can definitely reduce fogging and improve the quality of life. We believe that such innovative solutions will help ophthalmologists worldwide in continuing their practices with utmost safety.

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### Conflicts of interest

There are no conflicts of interest.

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## References

1. Bhardwaj A, Sharma C, Rajan MB. Simple solutions for fogging of spectacles on wearing surgical masks. *J Am Acad Dermatol* 2020. doi: 10.1016/j.jaad. 2020.08.041 [Epub ahead of print]
2. AlJasser MI. A simple method to prevent fogging of goggles during laser procedures. *J Am Acad Dermatol* 2020;82:e125.
3. Khanna V, Betdur R, Tagare S, Chhabra K, Venkatesh R. Do it

yourself antifogging noseband. *Indian J Ophthalmol* 2021;69:447-8.

4. Gurnani B, Kaur K, Mishra K, Venkatesh R. A simple solution to prevent microscope eyepiece fogging and spectacle fogging in COVID-19 era. *Indian J Ophthalmol* 2020;68:1712-3.
5. Pandey K, Vig S, Ratre B, Gupta N. Use of sterillium on protective goggles for anti-fogging during donning for care of COVID-19 patients: A novel technique. *Turk J Anaesthesiol Reanim* 2020;48:344-5.

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