INNOVATION PARTNERSHIPS
UNIVERSITY OF MICHIGAN

Protective Hygienic Shield for Ophthalmologic Exams

TECHNOLOGY NUMBER: 2020-365

OVERVIEW

Large, universal shield designed to protect eye care professionals and patients

- Free, downloadable files available to enable rapid prototyping for all who need it

BACKGROUND

As the COVID-19 pandemic circles the globe, the need to protect healthcare professionals is great. While social distancing is recommended, eye care professionals must come into close proximity with their patients to examine and treat eye conditions. Many devices used during eye exams, such as the slit lamp, require eye care professionals to sit face-to-face with patients, often less than 2 feet apart. The risk of exposure to pathogens in breath droplets and in other secretions of the eyes, nose, and mouth may be significant.

To address this need, U-M researchers have developed an improved breath shield for use with slit lamps and other ophthalmologic instruments. The shield is designed to protect both the eye care professional and the patient from the other's respiratory droplets and other secretions during the eye exam.

The shield is a large piece of acrylic or other solid, transparent material configured for attachment to the ophthalmologic instrument. Advantageously, the shield is larger than most existing commercial models, more universal (i.e., it is configured for use with slit lamps and other ophthalmologic instruments), and designed to be easily and rapidly fabricated by anyone with access to the downloadable design file and a CNC machine.

Technical drawings for the shield are available for download here in five different formats to facilitate dissemination and use. The files are available for anyone to download and fabricate and/or modify, as needed, to suit their needs in these perilous times.

ADDITIONAL DETAILS

The full set of design files for the Protective Hygienic Shield for Ophthalmologic Exams is offered in the public domain. The user may modify the files as needed and/or send them directly to a CNC machine for local generation of the product.

The full set of design files in five different formats is available for download in a .zip file.

Please click the "Order Now" button below to download the files. (Some files may open in the browser window; in that case please right click to download the file.)

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Category

Medical Devices
Life Sciences

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