



Protective Hygienic Shield for Portable Slit Lamp

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Category

Medical Devices

Life Sciences

Inventor

Lauro Ojeda

Phuoc Nguyen

Shahzad Mian

Further information

Katherine Pollard

kpollar@umich.edu

OVERVIEW

Large shield intended for portable ophthalmologic instruments

- Designed to protect eye care professionals and patients
- Free, downloadable files available to enable rapid prototyping for all who need it

BACKGROUND

Eye care professionals must routinely come into close proximity with their patients to examine and treat eye conditions. Many devices used during eye exams require eye care professionals to position themselves 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. The need to protect healthcare professionals and patients is great.

INNOVATION

University of Michigan researchers have developed a hygienic shield or breath shield for use with portable slit lamps and other hand-held instruments used during ophthalmologic exams. The shield is designed to protect the eye professional from a patient's respiratory droplets and other secretions during the eye exam. The shield is a large piece of acrylic or other solid, transparent material. The shield is larger than existing models, intended for portable instruments, more universal (i.e., it is configured for portable slit lamps as well as other ophthalmologic instruments), and it is designed to be easily and rapidly fabricated by anyone with access to the downloadable design file and a CNC machine.

Learn more



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.

OTHER

The user may modify the files as needed and/or send them directly to a CNC machine for local generation of the product. The design files for the Protective Hygienic Shield for Portable Slit Lamp are available free of charge under the Creative Commons CC0 1.0 Universal (CC0 1.0) license.