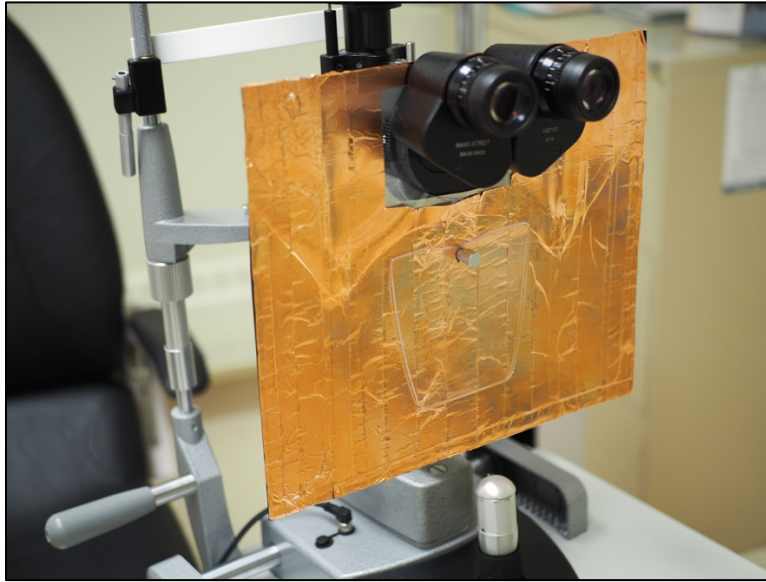


Do-It-Yourself Slit Lamp Shield



Design by: Andre Ali-Ridha MD (Comprehensive Ophthalmologist) and Xavo Campos-Moller MD (Complex Anterior Segment and Glaucoma Surgeon), Western Eye Care Centre, Western Memorial Hospital, Newfoundland and Labrador

The copper shield can be created at home in less than 10 minutes as a do-it-yourself project with simple inexpensive tools and supplies bought at the local hardware store for less than \$10.

Drs. Ali-Ridha and Campos-Moller designed and created their own slit lamp shield that improves on previous designs and addresses some of the limitations of clear-shield designs. Furthermore, it provides an alternative or augmentation for those who would like to include copper, which has been shown in recent research to have the best anti-viral properties (1, 2).

This shield is more flexible and can be cut and custom shaped to each ophthalmologist's certain specifications for a more comfortable use. At the same time, the anti-viral properties of the copper coating of the shield can help better protect our colleagues, especially as they begin to ramp up their clinics with increased patient volumes in a time when proper cleaning supplies are scarce and the potential for errors in cleaning the shield between patients can exist. Through trial and error over the last few months they have found that copper foil tape works best as it is inexpensive, easy to find and can be cut and modified effortlessly at home or in the office unlike solid copper sheets, which often need a special blade to cut through. The slit lamp shield is our lifeline and the only real protection from possible virus transmission, especially since as eyecare professionals we are in very close contact with patients all day and this is why the designers suggest their upgraded copper shield design.

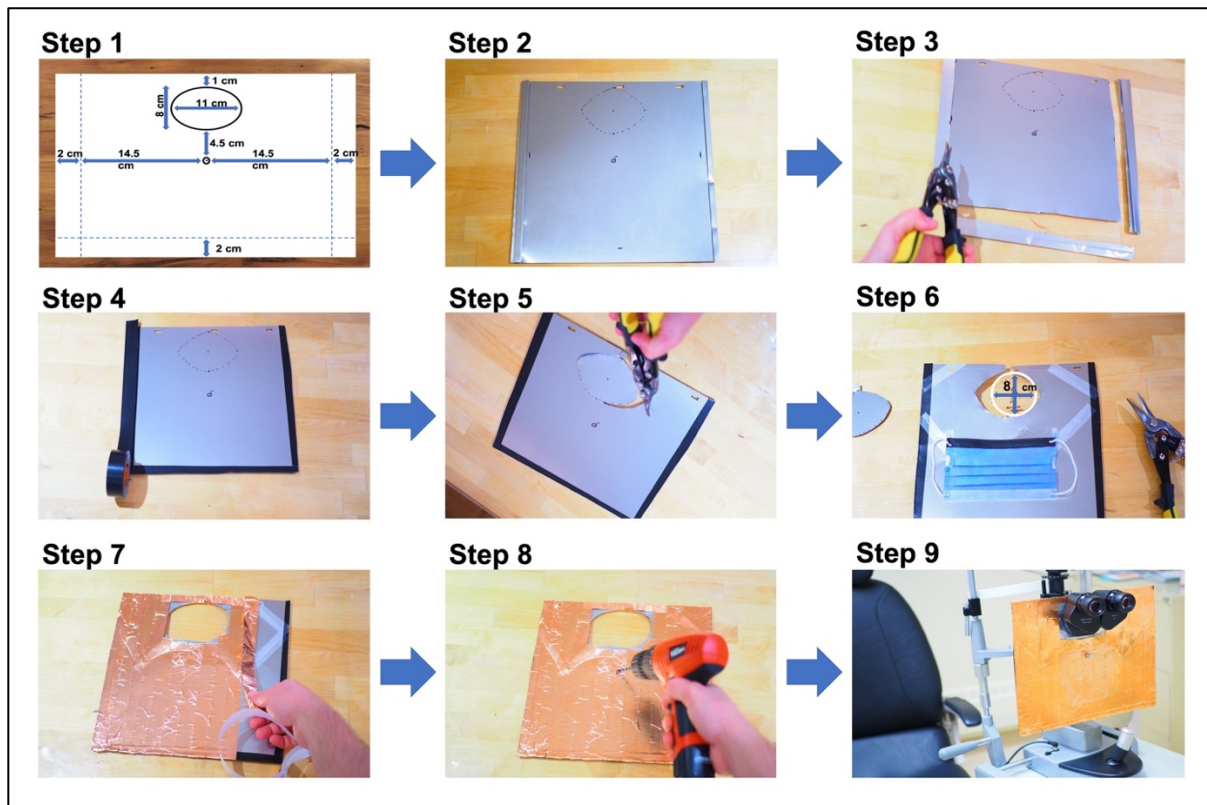
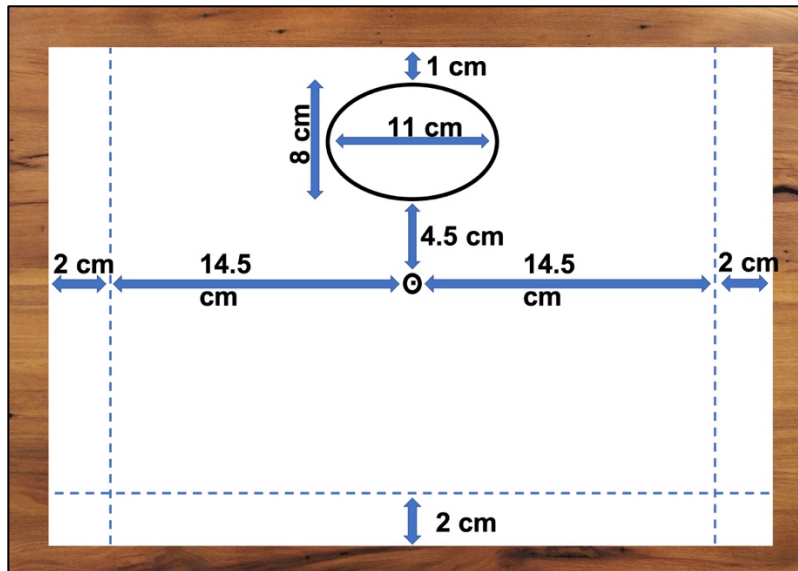
Supplies:

- Zinc metal sheet
- Copper foil tape
- Cutters (such as industrial-type scissors)
- Surgical mask with plastic shield
- Scotch tape and Industrial tape
- Black marker
- Ruler
- Drill with a 3/8-inch (or smaller) drill bit

Instructional Video:

https://mcgill-my.sharepoint.com/:f:/g/personal/andre_ali-ridha_mail_mcgill_ca/Etb68g1GrOtBmjexa4Gngw8BXj5WdePHWLtwZ-hN75myTg?e=zOmxM6

Template and Step-by-Step Instructions:



References:

1. Van Doremalen N, Bushmaker T, Morris DH, Holbrook MG, Gamble A, Williamson BN, et al. Aerosol and surface stability of SARS-CoV-2 as compared with SARS-CoV-1 (correspondence). *N Engl J Med*. 2020;382:1564-67. DOI: 10.1056/NEJMc2004973. Available at: <https://www.nejm.org/doi/full/10.1056/NEJMc2004973> (Accessed June 2, 2020)
2. Warnes SL, Little ZR, Keevil WC. Human coronavirus 229E remains infectious on common touch surface materials. *mBio*. 2015;6(6):e01697-15. DOI: 10.1128/mBio.01697-15. Available at: <https://mbio.asm.org/content/6/6/e01697-15> (Accessed June 2, 2020)