



DIY FACE SHIELD



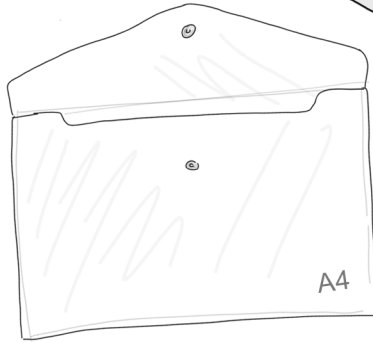
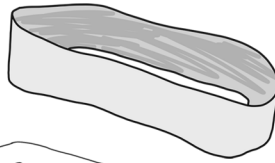
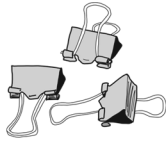
This is not a medical device and should only be considered if you have no other options.

It should be worn in combination with a well-fitting mask. Great care should be taken when removing it. All elements must be washed thoroughly with soap, if the device is to be used more than once. A guide to cleaning is included below.

MATERIALS

Clips

This method uses 5 flip-arm bulldog clips, though any strong clips or 'supaclips' work well. If you use plenty of them, regular staples and paperclips also work, if you have nothing else.



Headband

This method uses an elasticated hairband sold in many high-street chemists, though any headband or sweatband for sports is ideal. A section from any elasticated item of clothing also works well, for example, a 10cm wide strip cut from the leg of cycling shorts, stockings, tights or leggings.

Transparent Sheet

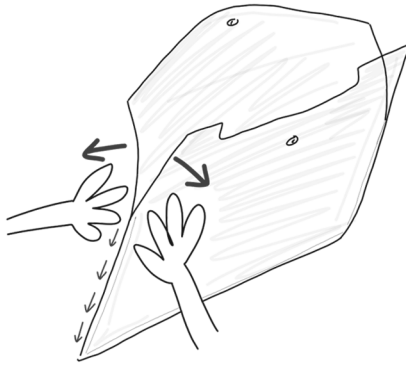
This method uses an A4 plastic document wallet. You can also use an A4 plastic sheet designed for laminating paper signs and documents. For a larger shield that covers the ears, you can laminate two A4 sheets together and carefully trim the shape to improve the fit.

METHOD

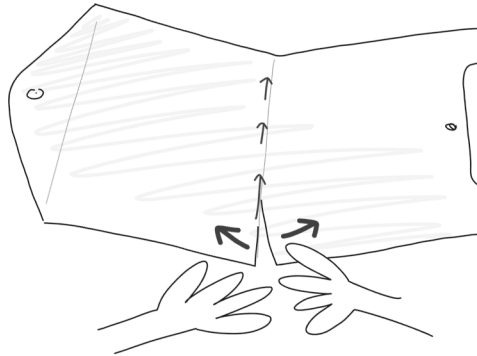
This is a very simple construction and takes less than a minute to assemble, but take care and do not rush. Try the face shield out a few times before using it. Time spent making it fit well now will pay off later, as you will be much less tempted to fiddle with it. The 'wearing your face shield' section provides more information on the importance of a comfortable fit.

A video of this making process is available to view on the Institute of Making website.

www.instituteofmaking.org.uk/faceshield



1. Begin by splitting both of the short sides of the wallet. If you are careful you can unpick the seam by hand or gently tear along the edge. Use scissors to neaten the edges and remove rough uneven areas where viruses may lurk.



2. Next, carefully split the plastic along the bottom. You can use both pieces if needed, but the one with the flap gives the face shield an extra-long guard, if you wear it with the flap pointing down.



3. Attach the long, bottom edge of the plastic to the top of the headband with your clips. Begin at the centre and move outwards. You may want to put the headband on when securing the last clips to ensure a good fit.

WEARING YOUR FACE SHIELD

Do not let wearing PPE lull you into a false sense of security.

Do not fiddle with your face shield once on. Do all you can to stop yourself bringing your hands to your face.

Wear a mask in combination with the face shield and take great care when taking it off.

Watch the UCLH COVID-19 donning and doffing video to better understand the careful mindset needed when wearing any personal protective equipment (PPE). [link on page 2]



CLEANING YOUR FACE SHIELD

This design is reusable, but in order to use it more than once, you need to take care of it and be sure to clean the guard thoroughly with plenty of soap, rinse with hot water and dry it fully.

If you have sterilisation fluid, the clips can be soaked in this overnight. Equally you can soak them in a little well-diluted bleach (observe the ratios provided on the back of the bleach bottle).

The headband can go in the washing machine to be cleaned with fabric detergent on a hot wash (60°C+).



EXAMPLES



Original Version: 5 flip-arm bulldog clips, 1 elasticated hairband and a plastic document wallet.



Adapted Version: Paperclips (more would be preferable) and the band cut from a woolen hat.

Adapted Version: Band made by tying a compression flight-sock around the head.



Adapted Version: Staples and a band made from a section of a pair of leggings.

Adaptation Versions: Large clips and using both sides of the plastic document wallet.

OTHER RESOURCES

UCLH Anaesthesia/ICM COVID-19 PPE Donning and Doffing video: <https://youtu.be/luRNrtUiy9s>

A guide to the efficacy of household cleaning products:
<https://www.ucl.ac.uk/news/2020/mar/analysis-household-cleaning-products-which-are-effective-against-coronavirus>

A guide to cleaning your phone: <https://www.bbc.co.uk/news/av/technology-51862924/soap-water-smartphone>

A video showing the making technique outlined: <https://www.instituteofmaking.org.uk/faceshield>