

HOW TO MAKE A DIY MEDICAL FACE SHIELD:

MATERIALS:

- Dual-temp or low temp **hot glue gun** and sticks.
- **EVA foam** (2mm thick, minimum 29" on a side). You can also experiment with various other sturdy headband materials, but we like EVA because it glues well, cuts precisely, and stretches a little to fit. You can order EVA on Ebay, Amazon, or Canal Rubber in NYC (or chop up an old yoga mat!)
- **Velcro:** 1" wide. The adhesive back stuff is not helpful, but won't hurt if you glue/staple it anyway.
- **Foam rubber:** min. 1" thick (cut to 1.5" strips).
- **5 mil clear Mylar film** (a.k.a Duralar). Can also use acetate transparency sheets, or equivalent sturdy material. You can get this in rolls from Dickblick or [Amazon](#).
- **Stapler**, preferably staple-pliers (such as P22 heavy duty stapler with 5/16" staples)

INSTRUCTIONS (refer to drawing on page 2):

So first... WASH YOUR HANDS!

1. **Prep Headband strips:** Cut EVA foam strips 29 ½" long x 1 ¼" wide. (Amazon sheets are 59" so half = 29 ½" but anything 29-30" is OK)
2. **Attach Velcro tabs:** Hot glue a 2" tab of hook Velcro on left side (inset about 1/4" from edge). Staple edges of Velcro to reinforce. Turn strip upside down. Hot glue and staple a 5" x 1" strip of loop Velcro (fuzzy) all the way to the right.
3. **Prep Transparent shield:** Cut 5mil mylar pieces 11 ½" x 9 ½" (if you don't have Mylar, a simple letter-sized acetate sheet will work, but doesn't offer as much coverage or rigidity as the Mylar). Turn the sheet to landscape orientation and round the bottom edges (so they don't snag on gowns, equipment, etc)
4. **Prep Foam Padding:** Cut foam rubber into strips 1 ½" thick x 10" long. These will provide soft spacing between the forehead/nose and the shield.
5. **Glue & staple Mylar** (landscape format) onto EVA foam strip, flush with top of strip and *centered* on strip.
PRO TIP: mark up a paper layout to work on top of, so you don't have to measure every time.
6. **Hot glue foam padding onto mylar** (REMEMBER: Use dual-temp glue gun on LOW SETTING for this step!). Center on mylar. Use ample glue and make sure to give it time to cool completely before moving (hot glue takes longer on insulating materials). if possible use a heavy ruler or other straight edge to apply pressure briefly.
7. **Remove hot glue strands, dust, etc.** Clean mylar with a cotton cloth and alcohol solution (or windex, if alcohol is unavailable).

DISCLAIMER: This is a makeshift emergency alternative for health workers and other at-risk workers who cannot otherwise obtain proper medical equipment. It is the best we could come up with limited resources, but we make no guarantee of full protection from any pathogens or other hazards. It is purely a "better-than-nothing" option for those who wish to use it.

MEDICAL FACE SHIELD

