

MASK TUTORIAL PROTOTYPE 1 MARCH 26, 2020 SONIA D. MEHTA, MD

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This mask consists of two layers of Halyard H600 medical fabric. The blue side is the right side and will face out.

The mask has passed the Respirator Fit Test.

NOTE: The masks will be sterilized after they are returned to the hospital.

## **INSTRUCTIONAL VIDEOS CAN BE VIEWED AT:**

https://anest.ufl.edu/clinical-divisions/mask-alternative/

## **SUPPLIES NEEDED**

- Medical grade fabric (Halyard H600) supplied by the hospital
- One piece of 16-gauge wire (not aluminum as it is too soft)
- 100% acrylic yarn, size medium #4 (used for ties)
- Cutting mat, ruler, rotary cutter if available
- Sewing machine, thread, scissors, sewing clips/paperclips, seam ripper (NOTE: Please use pins sparingly to avoid holes.)
- Jewelry/needle nose pliers and wire cutters

## **INSTRUCTIONS**

- 1. Cut two pieces of the Halyard fabric 7" × 8" (mask body) and two pieces 1" × 36" (tie/binding fabric). The blue side will be the outer side of the mask and the white side the inside of the mask. The 7" sides will be the width across the top and the bottom of the mask. The 8" sides will be pleated. Three pleats will make the final mask 4" deep.
- 2. Layer the two pieces of 7" × 8" fabric on top of each other. Sew a 1/4" seam on the 7" sides.
- 3. Turn the mask right side out. Finger press and clip, topstitch 1/4" from both edges on the sides you just clipped.
- 4. For the nose piece, cut the wire into a 6" piece. Make a small loop on each end of the wire and press flat. The loops should be facing the same way. Insert the prepared wire into the 1/4" seam on one of the sides you top



stitched. Center the wire. This is now the TOP of the mask.

5. Mark 2" down from the TOP edge of the mask on both sides. Make three accordion-style pleats along the 8" side as follows:



Make the 3 half-inch pleats starting at the 2" mark and clip each pleat. Space the pleats one after the other and clip them to make the mask 4" wide. Adjust the pleats accordingly.

The pleats do not have to be perfect as long as the mask is 4" wide. This is VERY important because if the mask is too short, it will not go under the chin in some cases, and if the mask is too long, it could leave too much of a gap on the side of the face.

Do not change the number of pleats as the bottom pleat is especially important to the curvature of the mask under the chin.

- 6. Sew the pleats down by sewing 1/4" seam. Repeat on the other side. When finished, the pleats will all be going down.
- 7. Cut two pieces of yarn 36" long. Mark the center of the yarn and clip to the center of the mask where the pleats are. Mark the center of the 36" strip and place under the edge of the mask where the yarn is. You want it halfway under the edge. Fold the side of the fabric strip over the top and clip in place (this is the "binding"). Start sewing where the pleats are. As you sew, you need to scoot the yarn into the



fold of the tie/binding fabric. Use a 3/8" seam and stitch down the edge of the mask. Keep folding the fabric in half lengthwise and stitch all the way to the end. Flip it over and sew the 3/8" seam all the way to the other end of the strip. To reinforce, sew a second line of stitching on both sides of the mask where the pleats are. Repeat on the other side. Note: the medical fabric does not fray so a single fold is sufficient.

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