Project
Medical Face Mask Pattern & How-To

Learn how to sew a face mask using our printable sewing pattern, amid the coronavirus pandemic.

INTRODUCTION

Volunteers across the country are doing what they can to help protect healthcare workers amid the COVID-19 outbreak, and that includes offering up their crafting skills and getting to work sewing face masks for those who need them most. Though their unconditional support is recognized and appreciated by hospitals and healthcare workers, it's important to note that homemade masks are not a replacement for personal protective equipment (PPE). Alok Patel, M.D., a pediatrician in New York City affiliated with New York-Presbyterian Hospital-Columbia and Cornell and UCSF Benioff Children's Hospital Oakland, says that there is an important distinction to be made between N95 masks and loose-fitting medical masks like the one in this tutorial. "When it comes to a mask's effectiveness, there really are two factors: the ability to filter out airborne particles and the actual fit," he explains. "The N95 mask is the best we have and duplicating it is no easy task. I've seen online tutorials using various types of fabrics and while it is possible the handmade masks could block out larger droplets, they are, understandably, not as effective as the N95s."

Hospital officials may suggest that homemade masks first go to those who are vulnerable and in need of protection, such as people in homeless shelters or other public services, Dr. Patel says. Others have suggested the sewn masks could act as a protective barrier and go over an N95, to prolong its use. "Obviously, in a crisis situation, healthcare workers may have to use sewn masks, or, as the CDC-suggested, 'bandanas or scarves'," elaborates Dr. Patel, "but we sincerely hope we do not get to that point."
If volunteer groups wish to band together in sewing masks or craft stores wish to host seminars or workshops, Dr. Patel advises they practice social distancing by meeting virtually. And preventative measures must still be implemented: Wash your hands properly and sanitize your home in order to minimize your exposure to illness.

"In the end, our PPE shortage needs to be addressed at the federal level and manufacturing needs to be prioritized," says Dr. Patel. "Nonetheless, this gesture from thousands of Americans is both comforting and inspiring—it's a reminder that we're all in this fight together."

*Update: As of April 3, 2020, the CDC is recommending that everyone should wear a cloth face covering in public settings to help slow the spread of COVID-19. Visit [cdc.gov](https://www.cdc.gov) for further information about this development and learn more about the CDC's no-sew face mask tutorial here.*
MATERIALS

Medical face mask template
Dense cotton fabric
Sewing machine and supplies
Elastic or cotton ribbon (optional)

**STEPS**

1. Download and print out template; cut out four pieces in total. Rotate so that the top front of fabric shapes are touching. Sew two front sections on the reverse side of fabric—this will become the front exterior and interior seam of mask with a 1/4" seam allowance.

2. Cut the straps: top straps measuring 2 by 18 inches (tied over the ears) and bottom straps measuring 2 by 13 inches (tied at the neck). Iron in half so that two raw edges are touching; iron in half again. Pin the straps into the top and bottom of both sides between two finished pieces with seams facing out.

3. Begin sewing right under the top strap and stitch around the mask, ending right after the bottom strap on the same side where you started, leaving a 2-inch gap. Turn right side out. Leave space to insert a filter, if desired. Iron. Optional: Stitch around all of the edges again for added durability.

4. Optional: Elastic can be used instead of straps; simply modify the pattern to include a place to thread elastic, at the sides of the mask. Cotton ribbon can also be used in place of straps.