

DESIGN AND DEVELOPMENT OF ANTI-MICROBIAL COATED 3D PRINTABLE FACE SHIELD TO PROTECT FROM COVID-19



The PRICELESS GIFT to Health Care Workers



3D PRINTED FACE SHIELD

The anti-microbial coated face shields protect health care workers from the spread of COVID-19. It gives protection not only to their eyes & face from the droplet & airborne transmission that come from coughing and sneezing of COVID-19 patients, but also prevents the person from touching their face with the unconscious gestures. This face shield is prepared by anti-microbial polymer-coated materials and designed to be placed over a conventional surgical mask to protect our health care workers from COVID-19.

- ☑ Easy one-step assembly with head-band & protective shield
- ☑ Easy to sanitize & reuse
- ☑ Lightweight and durable
- ☑ Complete coverage of face than any clinical/respiratory mask
- ☑ Highly transparent
- ☑ Easy to store



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Reusable Cotton Face Mask: Affordable Akshayapatra

Corona virus mainly spreads through the micro droplets thrown out when an infected individual sneezing or coughing. The droplets can travel up to several meters and find another host. Moreover, corona virus can stay active up to several days on selected surfaces. It infects the hands when a person touches these surfaces and subsequently infects the respiratory system when touching mouth or nose. Wearing mask can prevent the virus spread to certain limit. Unlike the commercial disposable masks, the re-usable cotton masks can be disinfected and reused several times.

Unique elements:

- Training individuals (capacity creation).
- Digital training (maintained social distancing).
- Encouraging the trainees to make and distribute masks to their capacity.
- Finding sponsors for financial support.
- Creating a network of user – trainee – sponsors.

Mode of training:

- Digital classrooms through Zoom or Whatsapp.
- Classroom/presentation videos in Tamil and English.
- Telephonic conversation with videos.



Mask size	Cloth Dimension (W x L)	Frill
Small (s)	5" x 5"	½"; 2 Nos.
Medium (M)	6.5" x 7"	½"; 3 Nos.
Large (L)	7.5" x 8"	½"; 3 Nos.

Material	: 100% cotton
Number of ply	: Single ply/Double ply
Fastening type (customizable)	: Ribbon/Elastic strap/Velcro strap
Borders (customizable)	: Borderless/two side/four side
Packing	: 100 pieces/bundle



Directions to use (Ribbon type):

1. Tie the upper pair of ribbons first to your back head. Always use loop knot for easy untie after use.
2. Pull the mask gently down to expand the frills all the way till throat and tie the bottom pair of ribbons on the top back head.
3. Make sure there no gap for free flow of inhaled/exhaled air.
4. After the use carefully untie the knot on the top back head first (bottom pair of ribbons) and then untie the back head knot (top pair of ribbons) carefully holding the mask. Make sure the outer surface of the mask does not touch your mouth or nose.
5. After removing the mask, directly drop it into a detergent solution.
6. Do not use a wet or humid mask.

Remember

- To still maintain at least 2 meter distance from others.
- To minimize going out and completely avoid unnecessary outing.

- To avoid touching mouth, nose and eyes when outing
- Wash your hands thoroughly as per protocol when back home.



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