

Important Safety Issues to be Considered Before Accepting Donations of Home-Made Masks, Uniform Bags, Scrubs Etc.

Many of us who can sew, myself included, are very keen to contribute to aid during the current pandemic by making masks and other items to help volunteers for their local Covid-19 Mutual Aid Group and/or NHS staff, carers and keyworkers. My concern is that we take time to ensure that what we make and give to others to use is:

1. **SAFE** (most important of all)
2. Effective
3. Wanted /Needed
4. Made to suit the needs of the users

To this end, I believe it is important for the group leaders of 'Covid-19 Mutual Aid' groups to decide on a list of basic criteria all donated items need to meet before being accepted and distributed. If we don't do this then, at best donations could be wasted, and at worst donations could potentially be putting others at increased risk.

Whilst I am **not** medically trained and **do not** claim to be an expert, I do have a master's degree in educational research from Cambridge University. I have done a great deal of research during the past two weeks, (please see some links below) looking at evidence regarding the transmission of the virus and the desirability, safety and efficacy of home-made masks (for volunteers and keyworkers) and uniform bags, scrubs or headbands (for nurses/carers).

There is an enormous amount of conflicting information on the internet. Taking all the information I have seen to date, and paying special attention to the **most common criteria hospitals which are accepting home-made items are currently using**, the following are things I believe the Covid-19 Mutual Aid Groups should consider before accepting donations of home-made masks, bags scrubs or headbands.

Masks

1. Must be made of closely woven **100% cotton** (quilting cotton is ideal) – **this is the ONLY fabric most hospitals asking for these will accept** as it is the only material available to home sewists which we know to be safe to breathe through. Polycottons and other fabrics may contain chemicals which are harmful if inhaled for extended periods of time (i.e. while breathing through a mask).
2. Fabric should be **prewashed** before construction to avoid shrinkage.
3. Mask must be **large enough** to cover the face from the high bridge of the nose to well under the chin.
4. Must be **washable in a HOT wash (60°C)** and capable of withstanding repeated washing, tumble drying and/or steam ironing.
5. Must be **comfortable and secure to wear** (so the user does not keep touching to adjust).
6. If a channel for an adjustable **nose wire** is included, (to shape the mask closely around the wearer's nose) this should be left open at one end so the wire can be removed for washing. User's should be made aware they need to do this!
7. Preferably have different fabrics inside and out to help users identify front and back.

8. **Come with safety information** regarding their restrictions, safe use and laundering instructions. These may be found here:
 - a.
 - b. <https://www.sewfacemaskshilly.com/safety?fbclid=IwAR0mZhdqPnPzi2VBVaHZGZKy a02J3obCyW2Q1dlt8jvvgeJ4jXLimPHZUmA>
 - c. <https://www.sfcddp.org/communicable-disease/healthy-habits/how-to-put-on-and-remove-a-face-mask/>
9. Preferably have a **pocket for a filter of user's own choice – research needed on what is safe.**

Special note about filters: Research is ongoing regarding safe filters to use inside masks with filter pockets. Filters currently being suggested on the internet include: kitchen roll, blue paper towel, pieces of shower curtain, interfacing, plastics of various kinds and Hepa filters (cut out from vacuum cleaner bags or filters made for air conditioners). However, all these things may make it very difficult to breathe and/or contain chemicals or fibres which are dangerous to inhale. **Hepa filters are dangerous as they may contain glass fibres** which will undoubtedly be released when vacuum bags are cut open. I do not recommend the group provides filters for volunteers to use in their masks until their safety has been scientifically established. Furthermore, I believe it is imperative any masks which have already been donated with filters sewn in should be clearly labelled and volunteers made aware of the potential risks. Please see: <https://abcnews.go.com/Health/scarves-hepa-filters-kind-face-covering-best-bet/story?id=70058603>

Recommended Mask patterns:

- Quick and Easy Without Pleats:
 - <https://inspiredlearningdotco.files.wordpress.com/2020/04/quick-mask.pdf>
- With Pleats:
 - https://www.hopkinsmedicine.org/coronavirus/_documents/INF2003076_VW_Hand-Sewn%20Mask%20instructions-1.pdf
 - Leah Day's helpful video: <https://youtu.be/iNX0cRrYj6U>
- Other patterns and lots of information, including up to date research on safety etc: <https://www.facebook.com/groups/SewAgainstCovidPHL/>

Other Sewn Items:

At the current time (11/04/20) none of our most local hospitals or Hospices (Addenbrookes, Papworth and EACH) are asking for any home-made fabric items although this situation may change. However, Peterborough City Hospital (among many others) does want scrubs and individual nurse friends may appreciate these too – please ask if you are unsure. The following home-made items may all be appreciated:

- **Scrubs:**
 - Updated List of **Hospitals Accepting Scrubs:** <https://trello.com/b/O8zlgTnE/hospitals>
 - See also the Facebook Group, 'For the Love of Scrubs' <https://www.facebook.com/groups/1500699350098765/about/>
 - **Scrubs Pattern:** <https://drive.google.com/drive/folders/1U24En45BeM0xGacJ3Sa4IVFgzJbNbM12>

- **Laundry Bags:**

- If you would like to make laundry bags for nurses and carers to use to bring their uniforms home in for washing these need to be a **minimum size of 18" x 20" (45cm x 50cm)**. They can be made of cotton or polycotton and must have two drawstrings. Repurposed pillowcases are ideal!
 - Pattern here: <https://www.facebook.com/notes/sew-much-to-do/scrubs-bag-pattern/1570685979750047/>

- **Head Bands and Ear Savers** (to prevent sore ears when wearing surgical masks)

- Patterns for both sewn fabric and crocheted ear savers here: <https://www.ravelry.com/patterns/library/sore-ear-savers>
- Pattern for buttoned headband <https://www.instructables.com/id/Best-Comfiest-Button-Headband-for-Nurses-and-Other/>

I hope you find the above helpful when considering donations. Further information and details of some of the sources I have used are listed below.

Kind regards,

Helen Jameson (aka Helen Selling)

Further Information Can Be Found Here:

Good Basic Overview:

<https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/coronavirus-face-masks-what-you-need-to-know>

COVID-19 Student Response page: founded by students at Harvard Medical School and updated regularly <https://covidstudentresponse.org/>

Round up of Collaborative Literature & Tutorial Review:

https://docs.google.com/document/d/16cweIiYIJ0SuC1LKU_BkibrqlyFG4x-jgiD2_ls9S7U/edit?usp=sharing

A well-established group of mask-makers in the USA who are constantly updating information based on research: <https://www.facebook.com/groups/SewAgainstCovidPHL/>

Article in 'The Inquirer': <https://www.inquirer.com/health/coronavirus/homemade-masks-coronavirus-do-they-work-how-to-make-them-20200324.html?fbclid=IwAR0sENa-GAoV1QN2NA1td8a5Dh4LGRGgQUA9VLhBAEc0NnvyQxuLTRLXbel>

USA Government Advice: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover.html>

Interesting Blog post attempting to look at all the current guidelines and research:

https://slatestarcodex.com/2020/03/23/face-masks-much-more-than-you-wanted-to-know/?fbclid=IwAR09dswQNhYkqrwrV_EXiMn236Y6cf2-zw0tRWLurwRJac533QIXaMi_efQ

Propublica Article: <https://www.propublica.org/article/what-we-need-to-understand-about-asymptomatic-carriers-if-were-going-to-beat-coronavirus?fbclid=IwAR1ftiN9JoYgj7SY3nFTRLp2KU8pNkdNKXN8v2YxIN9y-3CZzsf-tGSuQk>

Research – Testing the Efficacy of Home-Made Masks:

https://www.researchgate.net/publication/258525804_Testing_the_Efficacy_of_Homemade_Masks_Would_They_Protect_in_an_Influenza_Pandemic?fbclid=IwAR1YBor9sRSO-8hdUgNCw8FPyZJPGNpX4FfwWahzmfZz3PLTIBxn01H8MWc

Article in NY Times:

<https://www.nytimes.com/2020/03/17/opinion/coronavirus-face-masks.html>

Facebook Group for mask makers around the world – discussion, research, etc:

<https://www.facebook.com/JoinTheMASKERADE/>

Do Fabric Masks Work?

https://www.facebook.com/notes/join-the-maskerade/do-fabric-masks-work/106656277660753/?_tn_=-H-R

A Guide to Sewing Masks for Your Community: <https://www.facebook.com/notes/join-the-maskerade/a-guide-to-sewing-masks-for-your-community/115731496753231/>

Recent Research Studies on Virus Transmission:

Rothe C, Schunk M, Sothmann P, et al. Transmission of 2019-nCoV Infection from an Asymptomatic Contact in Germany. *The New England journal of medicine*. 2020;382(10):970-971.

Zou L, Ruan F, Huang M, et al. SARS-CoV-2 Viral Load in Upper Respiratory Specimens of Infected Patients. *The New England journal of medicine*. 2020;382(12):1177-1179.

Pan X, Chen D, Xia Y, et al. Asymptomatic cases in a family cluster with SARS-CoV-2 infection. *The Lancet Infectious diseases*. 2020.

Bai Y, Yao L, Wei T, et al. Presumed Asymptomatic Carrier Transmission of COVID-19. *Jama*. 2020.

Kimball A HK, Arons M, et al. Asymptomatic and Presymptomatic SARS-CoV-2 Infections in Residents of a Long-Term Care Skilled Nursing Facility — King County, Washington, March 2020. *MMWR Morbidity and mortality weekly report*. 2020; ePub: 27 March 2020.

Wei WE LZ, Chiew CJ, Yong SE, Toh MP, Lee VJ. Presymptomatic Transmission of SARS-CoV-2 — Singapore, January 23–March 16, 2020. *MMWR Morbidity and mortality weekly report*. 2020; ePub: 1 April 2020.

Li R, Pei S, Chen B, et al. Substantial undocumented infection facilitates the rapid dissemination of novel coronavirus (SARS-CoV2). *Science (New York, NY)*. 2020.