

“Everyone Gets a Mask!” Team Project

Project Management Guide and Resource Kit

Last updated: April 14, 2020

Note: The on-line version of this document at www.webility.md/masks has active hyperlinks for web access. Other project resource files are also there. Send comments to masks@webility.md.

Your Invitation to Participate

You and your friends are invited to team up rapidly and take on a fast-paced yet short-term volunteer project called “Everyone Gets a Mask!” The issue is urgent: coordinated action is needed NOW if we want to protect one another during the upcoming worst period of the COVID-19 pandemic. You and your friends and neighbors have an opportunity to make a big contribution in a short period of time.

Everyone Gets a Mask! is designed to assist you to quickly get organized and into operation, coordinating efforts in your community among:

- Local people who are willing to make high quality cloth masks and
- Local people who are willing to take requests for masks and distribute them to
- Local or nearby organizations and individuals who need them!

This Project Management Guide is a gift to you. We hope you take it and run with it.

You might want to pass along this idea to other civic, religious, cultural, or social action organizations in your local area. Just imagine, if you all collaborate, how much good will and mutual caring will be visible in your community!



Background and Overview

As you are aware, the COVID-19 pandemic has become a national crisis and the next few weeks are expected to be the worst. The CDC now recommends that everyone wear fabric face masks when we go outside – to keep one another from getting sick. (www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover.html) “I protect you; you protect me.” Around the country, millions of people are looking for protective face masks right now. If that is true in

your local area, the Everyone Gets a Mask! project can help meet this urgent need rapidly and efficiently.

A wonderful explosion of energy has already begun around mask-making, mostly coming from individual mask makers. Everyone Gets a Mask! is designed to build on that by offering a project model that efficiently connects local people who want to make masks with people in that same area who request them, especially those who are responsible for protecting workers in healthcare and essential businesses, but also vulnerable individuals and the general public.

Everyone Gets a Mask! might be a perfect fit for a new or existing group. You can donate your masks or sell them to cover your costs or as a fund-raiser. People with a variety of skills can play a role because it takes a real team to operate a program that consistently produces and distributes a large volume of high quality masks. The project can be done safely, while maintaining social distancing: most people will work in their homes, some alone in a car, and some will choose to work together, widely spread out in a large space.

You can also be confident that the homemade cloth masks your team produces will be high quality (practical, durable, and as effective as possible) if you observe the technical specifications and quality management recommendations in this kit. They are based on our careful analysis of the current state of the scientific and technical literature on homemade vs. surgical masks, including head-to-head comparisons of various options for designs and materials.

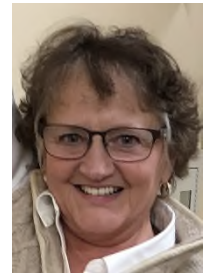
This project will be a short-lived sprint (we all hope). Homemade cloth masks are a stopgap solution until industrial manufacturing catches up with the need. Home mask-making can end when the whole country has access to well-manufactured masks.

The Project Management Guide and Resource Kit that follows below lays out everything you need and makes it simple to quickly plan, launch, and sustain a volunteer effort to get well-constructed homemade cloth masks to those who need protection from COVID-19 right away.

The materials in this kit were prepared as a gift for you by volunteer physician specialists in occupational medicine Claudia Hix, DO and Jennifer Christian, MD as well as business consultant David Siktberg, MBA. Your suggestions for how to improve the kit can be sent to your sponsoring organization or to:

Masks@webility.md.

Feel free to pass along this idea (and a link to the project webpage) to other people or organizations, including those in other communities, who might like to team up with you or start a Everyone Gets a Mask! Team Project of their own.



Resource Kit Components

Most of the information you need to get started on your effort to make and distribute masks is included in the resource files on the website www.webility.md/masks. The major items are these:

Project Management Guide (this document) – Provides step-by-step plan for organizing and carrying out your mask making effort.

Technical Specifications – Describes fabrics and materials to be obtained and used. Recommended items maximize protection, comfort, and breathability for mask wearers -- and ensures masks are both durable and washable. Includes technical resources and selected references. **Very important!!**

Basics: Orientation and FAQs – An overview of respiratory particles, how masks work (cloth and otherwise), who should wear them and why with links to government advice.

Instructions for Mask-Makers – How to make masks (with videos and links to other websites) and interact with other project team members.

Instructions for Masks Wearers – Describes when and how to wear masks (with videos) and care for them; has reminders to observe the other self-protective measures.

Template letter to seek community involvement

A Project Management Guide, Not a Strict Recipe

To save you time and mental energy – and to help you get started quickly – the guide below lays out the first steps and major decisions you need to make, and then goes through the main issues that someone on your team must oversee or carry out. We have carefully thought through the major requirements for conducting a successful volunteer project like this. There were more issues to consider, steps to take, and processes to manage than are obvious at the start. If you read these materials carefully, it is unlikely you will get surprised by anything big.

But also, you will need to tailor some steps to fit your situation and your needs. That is fine. Just be sure the quality and effectiveness of the masks you make are not compromised. Some parts of the process and the plan are critically important, which we have been careful to spotlight.

One or two good working sessions will probably be all it takes to get your operation under way.

Overview of the Plan

This purpose of this Project Management Guide is to help a group of volunteers organize themselves and get a project off the ground as simply and quickly as possible that effectively connects mask makers with mask users.

The Guide walks you through the steps involved in setting up and conducting a project that produces these intended results:

- Enthusiastic engagement of volunteers with the necessary skill sets.
- Good communications between your team and the intended beneficiaries of your project: organizations and individuals who need and want you to make masks for them.
- Fabrication of many high-quality cloth face masks in private homes or very large rooms.
- Orderly collection of the masks from the mask-makers on an on-going basis.
- Orderly delivery of masks to organizations and/or individuals who need and want them – on an on-going basis.

Included in this brief Guide are:

- A short list of major issues that explain the design of the project and which need to be kept in mind throughout it.
- For each of the 12 major tasks listed below, a description of the main issues involved, decisions that need to be made, and for some tasks, links to other resources and / or templates that serve as starting points:

Major Task
1. Design your project and write it up
2. Recruit a variety of volunteers, assign clear roles and responsibilities, and keep volunteers engaged
3. Identify organizations / people in the community who would like your masks, and make arrangements for delivery
4. Solicit money or in-kind offerings to help cover materials and expenses
5. Handle finances responsibly
6. Specify and/or supply mask-making materials to mask makers
7. Distribute mask assembly kits to makers with instructions
8. Make the masks
9. Collect the finished masks
10. Maintain quality standards of finished masks
11. Distribute the finished masks with instructions
12. Document, celebrate, and share your accomplishments

BEFORE YOU START: MAJOR CONSIDERATIONS

Before laying out the details of the project management steps, here are a number of overall important considerations.

Safety of volunteers:

This project is well-suited for people who are spending most of their time at home or alone outdoors – in order to comply with social distancing. The main strategy will be to minimize the number of in-person events, and especially close face-to-face interactions.

- If a group activity is planned, such as an assembly line operation, it should be done in a very large location using a lay-out that preserves the 6' space between people.
- See if purchasing of materials can be done on-line or in the store at off-hours.
- Delivery of materials to mask-makers and pick-up of finished masks will be most safely done by a solo driver via porch drop-offs.
- Delivery of masks to end users can be done by solo drivers by method pre-arranged with the receiving organization.



The basis for our recommendations

The materials and methods we recommend are based on our review and consideration of:

- Scientific articles, federal guidelines, searching the internet and social media for resources: on-line videos, open source designs and instructions for making masks.
- The functional requirements that define a high quality home-made mask: (1) efficacy (maximizing particle removal); (2) breathability (minimizing extra respiratory effort); (3) comfort for long wear (minimal pressure, friction); (4) durability; (5) washability; (6) availability of materials; and (7) cost.
- The need for project teams to rapidly organize and get started by minimizing the number of decisions they need to make beforehand.

Disclaimer and commitment to consistent high quality work products

No matter what material you buy or how careful you are, the masks you make by following the instructions in this project:

- Will NOT be N95 respirators nor provide that level of protection.

- Will NOT meet standards for Personal Protective Equipment (PPE) by the Occupational Safety & Health Administration
- Will NOT provide complete protection from getting infected with COVID-19.

But if you scrupulously follow the guidance laid out in the “Technical Specifications” and “Instructions for Mask-Makers” documents, your group WILL produce high quality masks that:

- Can remove between 50% and 90% of virus-laden respiratory droplets, depending on size, from the wearer’s inhaled or exhaled air, and 50% or more of the very tiny virus-laden aerosolized particles.
- Will be comfortable enough for most people to wear for several hours at a time.
- Will provide the best available protection until higher quality commercially manufactured masks are available, especially when combined with respiratory etiquette and frequent, thorough hand washing and disinfection of potentially contaminated surfaces.

It is important that your project leaders and your volunteer mask-makers declare their commitment to and responsibility for maintaining the actual quality of your group’s finished products.



DETAILED PLAN -- 12 PROJECT MANAGEMENT TASKS

1. Design your project and make your plan

These steps are listed in a sequence, but it will work best if you think through all of the issues more or less simultaneously – because each decision will affect others – before finalizing the plan. In general, since time is of the essence, ease and speed should be your guide.

a. Put together a written description of your project -- an outline may be good enough

b. Decide on your strategy with regard to several basic mask-making issues

- What are you going to make?
 - Cloth face masks to be used by healthcare workers without access to approved PPE (personal protective equipment) and the general public. There are two designs – which one or both?
 - Covers for N95 respirator masks, to be used by healthcare workers to prolong the useful life of their respirators.
 - See “Instructions for Mask Makers” document for details on design options.
- Are you going to distribute kits that include the materials to the mask makers, or will they do that themselves?
- Are you going to launder the masks after they are made and before delivery to the users?
- How and where will the materials be procured, and how will they be paid for?
- Are you going to donate masks, or use this as a fund-raiser (request donations or charge fees for the masks)?
- Roughly how many people do you want to supply with masks? For each person, assume 3 masks for people who work in organizations that launder daily. For individuals who will launder at home, assume 3-8 masks each.

c. Create a financial plan.

- For the mask models you intend to make, the sources of supply you intend to use, and for the volumes you intend to produce, determine the materials costs.
- Figure other uncovered expenses to be incurred – possibly laundry, delivery, packaging supplies, etc.
- Create a project budget / financial plan that incorporates the number of masks to be produced, materials costs.
- Determine whether you need to solicit funds beyond the project team to cover your production costs.

- d. Identify all the steps involved in the process, from start to finish, and the roles for volunteers in each one.
- Project oversight, planning, coordination, and management
 - Volunteer recruitment and scheduling / coordination
 - Finances – fund raising, project bookkeeping, handle expenses and payments
 - Distribution – get kits to mask makers, pick up masks, distribute finished product
 - Community relations – identify users of masks and make delivery arrangements
 - Mask making operations oversight/coordination
 - How many makers prefer to work alone?
 - Will there be any group manufacture (assembly line) and if so, where?
 - Quality management – ensure the masks meet specifications and are of consistent high quality.
- e. Write up a rough plan and circulate it among your team. Keep it front of mind.
- Clarify the purpose and goal of the project.
 - What is the timeline of your project going to be? Start date, anticipated end date.
 - Make a calendar and lay out the activities and number of masks that must be produced per week to meet that goal.
 - Design your organization (functions and roles)
 - Decide how you're going to manage all of the communication and detailed information involved (e.g. email, spreadsheets, database, website, etc.)
 - Decide how many volunteers you need in each role
 - Revise as necessary to fit your realities!
- f. Formally establish your project.
- Give it a name and figure out how you will handle money (for example, purchase materials and reimburse volunteers for their mileage or gasoline, or pay workers' wages).
 - The easiest way is probably to have an existing organization host the project.
 - Find out if your local jurisdiction requires you to obtain a license for this type of project.

2. Recruit volunteers or paid workers, assign clear roles and responsibilities, and keep them engaged

- a. Consider these questions:
- Where are you going to find the volunteers for this project?
 - Who will recruit them and how?
 - Who will ensure they know what is expected and train them how to do it?

- Who will schedule and coordinate them?
- How are you going to keep everyone up to date and manage everyday project communications within your team?
 - Email and texting will quickly prove unwieldy in a group of any size.
 - Consider starting a free internet group that combines a list-serv and website. We have used Groups.io and are very satisfied with it because it pushes emails out to all members; or they can choose to go to the website to read messages. Another option is a private Facebook group.
- Are you going to pay wages to any of your team members? (This might be a way to provide work and income for those who are out of work and financially distressed.)
- Are you going to reimburse any out of pocket expenses that the volunteers incur (like gas for the car for the delivery people)? If so, what is the procedure? (Remember the need for receipts and record-keeping.)



- b. Recruit the volunteers / workers.
- c. Assign tasks and responsibilities.
- d. Regularly communicate general status, operating results, and plan changes.
- e. Regularly ask for comments and feedback from team members and beneficiaries of your effort -- so that the project stays fresh, morale stays up, and results continuously improve.

3. Identify organizations / individuals in the community who would like your masks, and make arrangements for delivery

- a. Make a list of possible organizations to contact:
 - Healthcare delivery organizations: community hospitals, clinics, medical offices
 - Congregate housing and nursing homes

- Essential service providers: grocery stores, drug stores, police, fire, EMS, and other places where workers are performing essential services
 - Other sources of vulnerable individuals: senior centers, social service agencies, charities, etc.
- b. Get in touch with them.
- Check their websites, if any, to find out how to reach them, and maybe even the name of a person you can ask for.
 - Write them an email or letter and follow up by telephone.
 - Ask to speak to the person responsible for providing personal protective equipment (masks, etc.) to keep their staff, patients, residents, or visitors (as applicable) from getting infected with the COVID-19 virus / coronavirus or spreading it to others.
 - Ask if they would like cloth masks and/or covers for N95 respirators
 - If so, ask:
 - How many they would like. (They may already have a protocol. If not, recommend three per anticipated user: one to wear, one in the wash, and a spare.)
 - Which one of your pattern or designs they would prefer.
 - Whether they allow masks with metal in the bridge of the nose area (wired ribbon/ or pipe cleaners).
 - Whether they plan to wash masks in-house before use. (If not, you will need to do this.)
 - Make pre-arrangements for delivery: find out where to deliver the masks, at what time of day, who to ask for, and that person's phone number.
 - Document all of these pre-arrangements for each recipient organization and ensure the person responsible for deliveries has the information.

4. Raise money or solicit in-kind offerings for materials and expenses

Decide whether you are able and want to fund the project yourself, or whether external financial support should be sought. If external support is not needed, this step can be bypassed. Remember, even if you can afford to fund the project yourself, and even if you plan to charge for the masks, there will still be value in having community partners engaged.

- a. Make a list of possible organizations or individuals to contact:
- Potential organizations or individual users of the masks (see above)
 - Suppliers of materials being used (fabric, notions)
 - Local charities and philanthropic organizations (e.g. community foundations, Lion's Club)
 - Local individual philanthropists

- Churches
 - Community leaders who might want to lend visible support
 - People you know
- b. Decide whether and how to publicize a list of donors, how you will acknowledge in-kind contributions, and possibly establish different categories (from major to tiny contributions)
 - c. Decide what you going to ask for, and whether you can accept cash, checks, and/or credit cards and if so, how.
 - d. Get in touch with them.
 - Find contact information – email, website, phone number, etc.
 - Write them an email or letter and follow up by telephone. Explain the project and ask if they would like to contribute towards the cost of the project.
 - If a small organization, ask to speak to the president or boss.
 - If a large organization, ask to speak to the person who makes decisions about charitable contributions
 - e. Manage monetary contributions per #5 below (Handle finances responsibly).

5. Handle finances responsibly

- a. Set up a money management plan that is appropriate for your group. It is probably easiest to ask an existing organization that has financial systems all set up to host your project.
- b. Ensure all donations are tracked and verified.
- c. Require receipts for project purchases and expenses by volunteers that will be reimbursed.
- c. Keep organized and accurate records of project income and expenses.
- d. Have at least two people involved in the financial part of the project to protect its integrity.

6. Specify and/or supply mask-making materials to mask makers

- a. For quality control purposes, we recommend that the project team procure and provide materials to mask makers. If not, then the mask makers must know the specifications and be instructed how to test fabrics for suitability. (See the Resource Guide document on “Technical Specifications”.)
- b. Fabric must meet the specifications in the “Technical Specifications” Resource Guide in order for cloth masks to perform correctly and deliver intended protection to the mask wearer.
- c. New or lightly used fabrics only are acceptable, not heavily used fabrics.

- d. New fabrics must be washed in hot water in order to remove sizing and assure any shrinkage is complete.
- d. Masks must be made with two layers of fabric in order to enable secure attachment of ties/fasteners.
- e. Mask users, for safety's sake, must be able to tell the inside vs. outside of masks, as well as top and bottom. Using fabrics that are visually different for each layer makes this easier – such as patterned on the outside, plain on the inside. The safest method is to write in/out and top/bottom with a waterproof marker.

7. Distribute sewer's kits with instructions

- a. Write up and assemble the contents of each volunteer sewer's kit:

- Describe how/when materials will be dropped off and masks picked up.
- Set clear expectations for number of masks to be produced and by when – the interval from materials drop off to pick up of a certain number of masks
- Indicate who to contact with questions or problems (name, phone number, email)
- Create your own or modify the provided “Instructions for Mask Makers” document to reflect your choices for mask type and other local realities, etc. Topics should include:
 - The mask or cover design/pattern(s) to use.
 - Clear specifications for materials used in masks (if fabric and tie material are not included in kit), including how to test it for suitability.
 - If supplying, include the actual mask materials (fabric, elastic, etc.)
 - Fabric pre-washing instructions.
 - List of necessary equipment (tools, etc.)
 - Mask construction instructions including cutting, sewing, quality assurance, etc.+
 - Washing, drying and packaging finished masks.



8. Manage the mask-making operation

- a. Appoint someone as Mask Operations Manager -- to oversee the mask-making operation and manage the group of mask-makers, and coordinate pick-up/delivery
 - to monitor how things are going overall and keep tabs on the pace at which masks are being produced, and to coordinate with others if problems arise.

- to coordinate the schedule and route for mask material delivery and pick-up with the person/people doing delivery and pick-up.
- to contact first time mask-makers to see how things are going and ask if they need any support.
- to work with mask-makers who encounter difficulty or are not producing as expected.



- Appoint one or more people to drive a route, delivering mask-making materials and picking up finished masks and delivering them to a central location for processing.

9. Collect and inspect finished masks; prepare them for delivery to users

- Recruit volunteers to inspect, wash and dry (if appropriate), allocate and package the finished masks and drive a route to deliver them to recipient organizations which will in turn distribute them to users.
- Establish a central location for finished masks where they can be:
 - Inspected for quality
 - Washed and dried if needed
 - Allocated into batches for recipient organizations
 - Packaged in paper bags or as requested by the recipient organization
- Keep a log book of lots of masks received, including the date, type, number, who made by, and number (if any) that failed quality inspection. If practical, also indicate the delivery batch that the masks went into.

10. Maintain quality standards for finished masks

- Presume that some masks will not be high quality, especially at the beginning.
- Keep track of how many masks fail inspection and note which maker was involved so that patterns of problems can be noticed.
- Assign a tactful and positive person to contact mask makers whose masks too frequently do not meet your quality standards and coach them how to improve.

11. Distribute the finished masks with instructions

- Recruit volunteers to drive a route and deliver the masks along with instructions.

- b. Refer to pre-agreements with each recipient organization to assure that masks are delivered successfully. See #3 above.
- c. Create a “delivery ticket” that documents each shipment of masks or covers, including number of masks by type, number of covers, number of instruction sheets, date delivered, and who did the delivery, along with any other instructions to the recipient. Provide a copy to the recipient and a copy for the project files.
- d. Keep a log book of all deliveries made.
- e. In the happy event that your team produces more masks than are requested, send some to organizations in other areas that still have shortages. Here are examples of website that are collecting this information:

<https://www.weneedmasks.org/list/>

<https://www.vumc.org/coronavirus/how-donate-hand-sewn-face-masks>

You can also contact your state’s Emergency Management Agency. They are likely to be looking for masks, too. Here is an example from Massachusetts:

<https://www.mass.gov/covid-19-ppe-procurement-and-donation-program>

12. Document, celebrate, and share your accomplishments

- a. Make sure to keep your group’s spirits and energy up by celebrating each milestone and steadily documenting and sharing your accomplishments.
- b. Public postings on social media are a good way to spread the news far and wide. It will encourage other groups to participate in this project in their community, too! You can send tweets, make posts on Facebook or Reddit!

