

TOPIC: What makes for an effective non-medical (cloth) mask?

STATE OF PLAY: WHAT'S THE LATEST

In early [April](#), the CDC began recommending the use of cloth face coverings to slow the spread of COVID-19, while urging the public to save medical-grade masks (i.e., N-95) for healthcare professionals. Increasingly, US residents are embracing the use of non-medical masks in their daily routines, including for everyday trips to grocery stores and metro rides. As businesses re-open, and many institutions roll out safety protocols that include PPE for their employees and [customers](#), demand for non-medical masks will continue.

Some state and local governments are not only requiring employees to wear face coverings at work but are also requiring employers to provide masks. In [Delaware](#), [New York](#), and [Pennsylvania](#), businesses must provide the face coverings for employees to wear while onsite. For employees and customers, masks offer a consistent and reassuring message of safety.

With a [shortage](#) of medical-grade N95 masks, businesses, unions, and consumers must seek [alternative suppliers](#) for cloth based masks. For these buyers the question remains - what makes for an effective non-medical mask that will curb the spread of COVID-19?

THE BIG PICTURE: WHY IT MATTERS, WHAT MIGHT BE NEXT?

Scientific research and quality assurance testing historically has centered on the efficacy of medical-grade masks like the N95. Until there is adequate research on non-medical masks, employers can assess non-medical face masks across 4 key dimensions:

1. **Design:** What material is the mask made of and how many layers of fabric are there? How well does the mask fit around the face to minimize gaps?
2. **Comfort:** Is the mask lightweight? Does the mask allow for breathing without restriction?
3. **Reusability:** Can the mask be washed multiple times without being deformed/damaged?
4. **Efficacy:** What is the mask's particle filtration efficiency rate (i.e., what percent of particles are filtered out by the mask)?

Buyers of non-medical masks may also choose to prioritize brands that use sustainable / alternative materials (e.g. [Reformation](#) and [Patagonia](#)), brands that have donation commitments tied to masks purchases (e.g., [Rent the Runway](#)*, [Lucky Brand](#)*, [Indie Source](#), [Nordstrom](#), [Old Navy](#)) and / or community coops and black-owned businesses (e.g., [Carolina Textile District](#)).

* Stop the Spread partner

Cloth masks should be reviewed across 4 dimensions

	Design	Comfort	Reusability	Efficacy
High consideration given	<ul style="list-style-type: none"> • Tri-fold pleated design, multi layer fabric • Fully covering nose and mouth • Contains nose wire and elastic ear bands 	<ul style="list-style-type: none"> • Lightweight, breathable • May contain testing on "breathability" 	<ul style="list-style-type: none"> • Designed for reuse, washable many times • Not manufactured at facility producing "medical grade" PPE 	<ul style="list-style-type: none"> • Certified testing for particulate efficiency • Particulate filtration efficiency >60%
Some consideration given	<ul style="list-style-type: none"> • Some layered fabric • Covers mouth and nose loosely • No wire to tighten fit 	<ul style="list-style-type: none"> • May or may not be lightweight, breathable 	<ul style="list-style-type: none"> • Designed for reuse 	<ul style="list-style-type: none"> • Particulate filtration efficiency 20-60%
Seek alternatives	<ul style="list-style-type: none"> • Single-layered fabric • Not-fitted well to face 	<ul style="list-style-type: none"> • Uncomfortable, not, breathable 	<ul style="list-style-type: none"> • Single-use only 	<ul style="list-style-type: none"> • Particulate filtration efficiency <20%

POTENTIAL IMPACT FOR YOUR ORGANIZATION / THE QUESTIONS WE'RE ASKING

Organizations and Workers

- Has your organization set clear standards around employee and customer mask requirements, as well as who will be responsible for providing PPE?
- Where will you purchase masks for your employees or customers? How might you support your employees or customers to purchase masks?
- How will you train employees on the benefits and usage of cloth masks?
- When should mask requirements be either strengthened (e.g., in the case of a second wave) or relaxed for your business?
- What supplementary preventative measures (i.e., hand-washing, social distancing) are in place as part of your broader return to work safety protocol?

Government Institutions

- Should the FDA or another public organization issue a classification system, as is the case for surgical gowns, to help inform buyers in assessing non-medical masks?
- How will existing and new, non-medical mask suppliers be supported to ensure supply levels remain sufficient?
- In the case of supply shortages of non-medical masks, should the CDC put out prioritization guidelines around highest-need employer groups (i.e., essential industries, worksites with high risk of disease spread)?
- How will we ensure non-medical masks are supplied to those most in-need or disproportionately impacted by the crisis?

WHAT STS IS DOING ABOUT IT

- Stop the Spread (STS) is working with non-medical mask suppliers and manufacturers, including [Brooks Brothers](#), [Rent the Runway](#), [Eagle Fabrics](#) and [Lucky Brand](#), to provide production specs, general guidance and connections.
- Stop the Spread is working with organizations like [C19 Coalition](#), [GetUsPPE](#) and [Project N95](#) to ensure that non-medical grade PPE is being funneled to organizations, individuals and communities that are the most in-need.

If you are an organization looking to purchase non-medical grade PPE or a manufacturer looking for guidance or support in producing non-medical PPE, please [let us know](#).

LEARN MORE: OTHER EXPERTS AND SOURCES

- [CWA Union FAQ for Evaluating Cotton Masks](#)
- [Consumer Report: How to Choose and Wear a Mask During COVID-19](#)
- [American Chemical Society Study on Most Effective Fabrics for Masks](#)

STS has joined forces with impact investing firm, ImpactAssets, to connect promising COVID initiatives with investors through the ImpactAssets Stop the Spread Program.