This guide is meant to serve as a reference for purchasing Personal protective equipment (PPE) during the COVID-19 crisis. Where possible, we’ve tried to source Michigan produced PPE. We have made every effort to identify legitimate vendors, distributors, and products, Michigan Manufacturing Technology Center is in no way endorsing a vendor, distributor, or product. Companies and individuals purchasing PPE should conduct their own validation of products and services before making purchases.

Last Updated: 04/27/2020
Face Masks - Disposable

Domestically produced, certified, N95 and surgical masks are being routed to medical facilities and first responders; imported masks are likely to be the only disposable masks consumers will be able to find at resellers. If you are uncomfortable with using imported masks, consider sewn, cloth masks.

Milton Manufacturing
www.miltonmfg.com
313-366-2450
Jim Green
313 407-3138

Great Lakes Filter
33 Bloomfield Hills Pkwy Suite 120a,
Bloomfield Hills, MI 48304
info@greatlakesfilters.com
(800) 521-8565
https://www.greatlakesfilters.com/flat-face-masks/
Flat Masks and KN95
Face Masks - Disposable (continued)

detroitbikes.com
Zakary Pashak
(313) 815-9886
Have KN95 but not 3M - currently have 40,000, total order of 300,000. Min order 500 min.

I have N95 and KN95 masks arriving daily. I’ve brought in about 175,000 so far- they sell the minute they arrive.
Face Masks – Sewn

Detroit Sewn in Pontiac
https://www.detroitsewn.com/

We currently offer three versions of our washable, reusable fabric masks:

1. Standard face mask with twill ties
2. Standard face mask with elastic
3. Face mask with pocket for filter and elastic

Our masks are made with 100% tightly woven cotton fabric, and 100% cotton twill ties or latex-free elastic. The masks have pleats to allow for different face sizes, plastic coated wire at the top to form around the nose, and no gaps between the mask and the face.

2-ply

softgoodsdetroit.com
Josh York
(734) 394-7408
https://softgoodsdetroit.com/products/3ply-expandable-isolation-mask

3-ply
Face Masks – Sewn (continued)

<table>
<thead>
<tr>
<th>Company</th>
<th>Contact Person</th>
<th>Phone Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>eissmann.com</td>
<td>Matt Brown</td>
<td>(248) 705-6368</td>
<td>Not certified - currently doing 1400 day capacity at 2400</td>
</tr>
<tr>
<td>Freeman Manufacturing</td>
<td>Jacqueline Harrison</td>
<td>(269) 651-2371</td>
<td>Currently producing hospital gowns, Non-certified masks</td>
</tr>
<tr>
<td>detroitdenim.com</td>
<td>Eric Yelsma</td>
<td>(313) 932-0486</td>
<td>Gowns - disposable 3 piece hospital gown, masks - folded standard mask, Face Shield - Ploy film with foam band, basic splashguard.</td>
</tr>
</tbody>
</table>
**Face Shields**

**RCO Engineering**  
jeff.simek@rcoeng.com  
http://www.rcoeng.com  
Jeff Simek  
(586) 415-4707

<table>
<thead>
<tr>
<th>Order Quantity</th>
<th>Piece Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-100</td>
<td>$6.98</td>
</tr>
<tr>
<td>1,000+</td>
<td>$5.21</td>
</tr>
<tr>
<td>10,000+</td>
<td>$3.98</td>
</tr>
<tr>
<td>100,000+</td>
<td>Call for Pricing</td>
</tr>
</tbody>
</table>

- 9.5” Length by 9.5” Wide Lens  
- One Size Fits Most  
- Clear Lens  
- Polypropylene Headband  
- Elastic Loop  
- Latex Free  
- Non-Slip  
- Splash Protection Eye Wear/Splash Guard Only Safety Shield  
- Made in the U.S.A.

**Sutherland Felt Co. & Sutherland Sewing Co.**  
sutherlandfelt.com  
Bob Spencer  
(248) 280-0450  
https://sutherlandfelt.com/face-shields/

Clear .020” PETG face shield – approx. 13” W x 7.5” H (flat dimension)  
Adjustable hook & loop headband  
1” Foam forehead piece – allows shield to go over glasses

$7
Face Shields (continued)

Vincent Rubino
Branch Manager
Office: 248-299-9500
Direct: 248-293-1403
Email: rubino.v@totalplastics.com

Three designs:
  - Disposable: $6
  - Reusable w/ 1” foam: $7
  - Extended use: $8.50

Plastic shields are also available in bulk for those wanting to assemble their own shields.

Total Plastics is also making polycarbonate and acrylic partitions.
Face Shields (continued)

Jeff Nelson  
Advanced Engineering Manager  
M: +1 586-216-6713  
15030 23 Mile Rd  
Shelby Twp., MI 48315  
E-mail: JNelson@Centuryplastics.net  
www.cieautomotive.com

They are $2.10 ea plus sales tax and shipping. Minimum order is 100 pcs. Each carton holds 100 pcs and we only sell in full box quantities.

We have capacity for 25,000 a week. Shields include an anti-fog coating on one side and come with a comfort fit low density PUR foam headband.

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Bambi Hollingsworth, CPIM  
Vice President of Manufacturing  
O: (616) 748-6248  
C: (616) 648-6626  
bhollingsworth@primera-inc.com

Already used by several hospital groups and counties  
- Covers entire face  
- Latex Free (Not made with natural rubber latex)  
- Durable shield material  
- Can be worn with or without glasses  
- Fog resistant

<table>
<thead>
<tr>
<th>Standard Pack</th>
<th>Bulk Pack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging: 20/CS</td>
<td>Packaging: 96/CS</td>
</tr>
<tr>
<td>Unit Price: $3.75</td>
<td>Unit Price: $3.70</td>
</tr>
<tr>
<td>MOQ: 900 Units</td>
<td>MOQ: 1536 Units</td>
</tr>
<tr>
<td>Item Number: FACE SHIELD</td>
<td>Item Number: FACE SHIELD-B</td>
</tr>
</tbody>
</table>

The minimum order quantity is a skid quantity, but we have been letting local companies come and pick up a box or two as needed.
Face Shields (continued)

https://www.sisuguard.com/sisu-medical-face-shield/

Minimum order of 10 units. For bulk orders please email ppe@sisuguard.com

Reduce the risk of exposure by separating the medical professional from the patient with the SISU Medical Face Shield.

Details:
13" Elastic Headband
1" Forehead Standoff
13" x 9" Area Of Coverage
.018" Thick Prime APET
Anti-Fog

$7.50

Arbor Apothecary
https://arborapothecary.com/

Arbor Apothecary is a manufacturer of personal protective equipment, created by the team at Adaptive Energy, a fuel cell battery manufacturer in Ann Arbor. We created Arbor in response to desperate pleas from medical professionals across the country for PPE.

Easy to assemble kits

Staple the elastic strap to the edges of plastic shield.
Remove the paper backing from the self-stick foam pieces and stick to the plastic shield.

Also producing hand sanitizer.
## Face Shields (continued)

I'm Jeff Nelson at CIE USA in Shelby Twp. We can supply 25,000 face shields a month. We also have over 100 injection molding machines sitting idle. If you need help with molding or to buy face shields please contact me at jnelson@centuryplastics.net or 248-320-0524

| DEP and partner Suppliers can provide Face Shields at volumes of up to 3,000 per day and about 12 day lead time to deliver.  
john_gelmisi@depusa.com  
248 219 9838 |

| Steelcase Grand Rapids location only  
https://www.steelcase.com/covid-19/ |
Gloves

Disposable gloves are best located through your existing consumables/office supplies provider. Many suppliers are prioritizing existing customers first.

Gloves by Web
https://glovesbyweb.com/
The disposable gloves division of Auric Enterprises, Inc. A Michigan-based corp. Offers a variety of exam gloves for medical and non-medical applications. Due to increased demand, processing and shipping of all in stock orders is at least 10-14 days. Backordered items are projected to be at least 30-60 days delayed.

Orders can be placed online or by calling 877-932-4568

Tri-CHem
https://www.tri-chem.com/product/disposable-gloves/
powdered and non-powdered versions and meet all FDA and ASTM requirements. 800.456.6255
Hand Sanitizer

https://www.michigan.gov/lara/0,4601,7-154-89334_10570_90824_522352--,00.html

All TTB-permitted DSPs may manufacture hand sanitizer products that are comprised of:

- denatured or undenatured ethanol
- glycerol (not less than 1.45% of the finished hand sanitizer product on a volume basis), and
- hydrogen peroxide (not less than 0.125% of the finished hand sanitizer product on a volume basis)

Hand sanitizer is readily available from local breweries typically in gallon jugs; locate one close to you by search the web. Shipping of a flammable liquid can be expensive so locating a supply near you can be both timely and less expensive.

Arbor Apothecary
https://arborapothecary.com/

Arbor Apothecary is a manufacturer of personal protective equipment, created by the team at Adaptive Energy, a fuel cell battery manufacturer in Ann Arbor. We created Arbor in response to desperate pleas from medical professionals across the country for PPE.


Also producing Face shields.

Atwater Brewery
https://www.atwaterbeer.com/
atwater@atwaterbeer.com

$4 4 oz bottles, case of 54 for $200 and $30 gallons. They are ordered single or case of 4
Hand Sanitizer (continued)

Detroit Bus Company
Medical-grade hand sanitizer manufactured to World Health Organization standards
We are currently offering quarts, half gallons and gallon jugs.
Here’s what’s inside:
80.00% Alcohol to kill viruses and bacteria.
1.45% Food-grade glycerin to make your hands soft and smooth.
0.12% Hydrogen peroxide
18.43% Distilled water

JOURNEYMAN DISTILLERY
109 GENERATIONS DRIVE
THREE OAKS, MI 49128
269-820-2050

https://www.journeymandistillery.com/

We are offering an 80% alcohol formulation approved by the World Health Organization, available in sizes from 1.75 liter bottles up to a 270 gallon tote. Please note that these are “refill” style containers. No pumps are currently available.
Hand Sanitizer (continued)

Plymouth Technology
http://plymouthtechnology.com/
248.537.0081

Chemical company now makes FDA approved EUA hand sanitizer using ethanol

5 gallon buckets
55 gallon drums

Some products donated to hospital, some sold retail. Product is branded HavaClean. Company will continue to make after restart.
Hospital Gowns

Detroit Sewn in Pontiac
https://www.detroitsewn.com/

ONE-SIZE ISOLATION GOWNS
Also producing 2-ply cloth face masks.

Vaughn Custom Sports
550 S. Glaspie Street
Oxford, MI 48371
586-243-1345 (c)
248-969-8956 (o)
Arlene Vaughn
avaughn@vaughnhockey.com

More pictures of the gowns are on our website at http://www.vaughnhockey.com as well.

The gown is made out of 210 Denier Nylon with a water resistant urethane coating on the back surface that makes it extremely fluid resistant and it is sewn with lock stitch construction.

Size 1 XS-XL: $18/gown
Size 2 XXL: $20/gown

Colors may vary.
**Hospital Gowns (continued)**

| detroitdenim.com | 
|------------------|-----------------|
| Eric Yelsma      | (313) 932-0486  |
| Gowns - disposable 3 piece hospital gown. masks - folded standard mask, Face Shield - Pleo film with foam band, basic splashguard. |

| Freeman Manufacturing | 
|-----------------------|-----------------|
| jacqueline@freemanmfg.com | http://www.freemanmfg.com |
| Jacqueline Harrison | (269) 651-2371  |
| Currently producing hospital gowns, Non-certified masks |
# Barriers (Sneeze Guards)

<table>
<thead>
<tr>
<th>Company</th>
<th>Website</th>
<th>Contact Person</th>
<th>Contact Information</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Plastics</strong></td>
<td><a href="http://www.totalplastics.com">www.totalplastics.com</a></td>
<td>Vincent Rubino</td>
<td>Office: 248-299-9500, Direct: 248-293-1403, Email: <a href="mailto:rubino.v@totalplastics.com">rubino.v@totalplastics.com</a></td>
<td>polycarbonate and acrylic partitions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Total Plastics is also making face shields.</strong></td>
</tr>
<tr>
<td><strong>Eagle Technologies</strong></td>
<td><a href="http://www.eagletechnologies.com">www.eagletechnologies.com</a></td>
<td>Brandon Fuller</td>
<td><a href="mailto:b.fuller@eagletechnologies.com">b.fuller@eagletechnologies.com</a></td>
<td>Barriers and isolation cubes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Company is also making face shields</strong></td>
</tr>
<tr>
<td><strong>sightlinedisplay.com</strong></td>
<td></td>
<td>Brian Cole</td>
<td>(616) 784-4488</td>
<td>Barriers (sneeze guards) ; Signage ; Displays</td>
</tr>
</tbody>
</table>

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*Note:* The image is not part of the text content and is not included in the natural text representation.
# Building/Surface Sterilization and Cleaning

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Contact Information</th>
<th>Website</th>
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<tbody>
<tr>
<td>Premium services</td>
<td></td>
<td></td>
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<tr>
<td>Surface Anti-Bacterial covering</td>
<td>Building and Grounds services</td>
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<tr>
<td>Fogging</td>
<td>Becky Arnold</td>
<td><a href="https://www.cleanaci.com/">https://www.cleanaci.com/</a></td>
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<tr>
<td>A&amp;C Property services</td>
<td></td>
<td></td>
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<tr>
<td>Clorox 360 fogging</td>
<td>Building cleaning services</td>
<td></td>
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</table>