Face Masks for Midwives in the Time of COVID-19
COVID-19 Context for Midwives

• CDC estimate: 25% of people infected don’t present any symptoms
• 2 NYC hospitals: 14% of patients admitted in labor who tested positive showed no symptoms
• Infectious droplets can linger in the air for hours
• With varying likelihood, providers and patients may be infectious
• Severe, widespread shortage of PPE
Evolving Guidance for Face Masks

- CDC in late March: No reason for healthy people to wear face masks
- CDC in April: Everyone should wear a mask in public
- ACOG recommends N-95, or face mask, for all patient contact; patients wear masks when with providers
- My local hospital:
  ~ March: no masks for providers on L&D
  ~ April: Everyone in hospital wearing masks at all times; face shields for all patient contact; N-95 for labor
Historic Evidence Being Re-Examined

- CDC: Any cloth face mask protects others from the wearer
- Recent research suggests cloth masks can be constructed to perform better to protect the wearer
- Risk mitigation is the point
- Homemade masks are not tested in lab environments and rigorous specifications regarding safety conveyed are not available
Recent Face Mask Research/Info

- Dr. Yang Wang, Missouri University of Science and Technology: testing cotton face masks with filters
- Dr. Scott Siegel, chairman of anesthesiology at Wake Forest Baptist Health studied mask materials and filters
Types of Masks & Comparative Effectiveness

2013: Testing the Efficacy of Homemade Masks: Would They Protect in an Influenza Pandemic (published in Disaster Medicine and Public Health Preparedness)

<table>
<thead>
<tr>
<th>Material</th>
<th>$B$ atrophaeus Mean % Filtration Efficiency</th>
<th>$B$ atrophaeus SD</th>
<th>Bacteriophage MS2 Mean % Filtration Efficiency</th>
<th>Bacteriophage MS2 SD</th>
<th>Pressure Drop Across Fabric Mean</th>
<th>Pressure Drop Across Fabric SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% cotton T-shirt</td>
<td>69.42 (70.66)</td>
<td>10.53 (6.83)</td>
<td>50.85</td>
<td>16.81</td>
<td>4.29 (5.13)</td>
<td>0.07 (0.57)</td>
</tr>
<tr>
<td>Scarf</td>
<td>62.30</td>
<td>4.44</td>
<td>48.87</td>
<td>19.77</td>
<td>4.36</td>
<td>0.19</td>
</tr>
<tr>
<td>Tea towel</td>
<td>83.24 (96.71)</td>
<td>7.81 (8.73)</td>
<td>72.46</td>
<td>22.60</td>
<td>7.23 (12.10)</td>
<td>0.96 (0.17)</td>
</tr>
<tr>
<td>Pillowcase</td>
<td>61.28 (62.38)</td>
<td>4.91 (8.73)</td>
<td>57.13</td>
<td>10.55</td>
<td>3.88 (5.50)</td>
<td>0.03 (0.26)</td>
</tr>
<tr>
<td>Antimicrobial Pillowcase</td>
<td>65.62</td>
<td>7.64</td>
<td>68.90</td>
<td>7.44</td>
<td>6.11</td>
<td>0.35</td>
</tr>
<tr>
<td>Surgical mask</td>
<td>96.35</td>
<td>0.68</td>
<td>89.52</td>
<td>2.65</td>
<td>5.23</td>
<td>0.15</td>
</tr>
<tr>
<td>Vacuum cleaner bag</td>
<td>94.35</td>
<td>0.74</td>
<td>85.95</td>
<td>1.55</td>
<td>10.18</td>
<td>0.32</td>
</tr>
<tr>
<td>Cotton mix</td>
<td>74.60</td>
<td>11.17</td>
<td>70.24</td>
<td>0.08</td>
<td>6.18</td>
<td>0.48</td>
</tr>
<tr>
<td>Linen</td>
<td>60.00</td>
<td>11.18</td>
<td>61.67</td>
<td>2.41</td>
<td>4.50</td>
<td>0.19</td>
</tr>
<tr>
<td>Silk</td>
<td>58.00</td>
<td>2.75</td>
<td>54.32</td>
<td>29.49</td>
<td>4.57</td>
<td>0.31</td>
</tr>
</tbody>
</table>

$^{a}$ Numbers in parentheses refer to the results from 2 layers of fabric.
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How to Wear a Mask

**DO** wear the mask as shown

**DON’T** wear the mask
- Just below the nose
- Chin exposed
- Loose gaps on the sides
- On the tip of the nose
- Under the chin
Safety Tips for Masks

• Always wash your hands before and after wearing a mask
• Use the ties or loops to put your mask on and pull it off
• Don’t touch the front of the mask when you take it off
• For apartment dwellers, put the mask on and remove it while *inside your home*. Elevators and stairwells can be high-contamination areas
• Wash and dry your cloth mask daily and keep it in a clean, dry place
• Don’t have a false sense of security
Considerations for Community Midwives

• Ask clients to wear any homemade face mask during in-person encounters to protect the midwife and themselves

• Midwives wear face masks consisting of two layers of cotton with HEPA vacuum bag filter inserted between the two layers during contact with clients

• Combine use of face masks with rigorous safety and risk mitigation practice protocols

• We love you and need you, we are relying on you – be safe!