In the pandemic and panic of COVID-19 what should doctors know about masks and respiration?

**WhO shOulD Wear masks anD WhICh One?**

1. **Who should wear masks?**
   - Asymptomatic infected persons
   - Symptomatic infected persons

2. **Why should doctors wear masks?**
   - To prevent the spread of the virus
   - To protect the wearer from contact with infected persons

3. **What is the difference between a surgical mask and a respirator mask?**
   - Surgical mask: designed to protect the wearer from exposure to airborne particles
   - Respirator mask: designed to protect both the wearer and others from the spread of respiratory droplets

**Preventing the spread of the SARS-Cov-2 virus from man-to-man is the only way to stop the exponential growth of this epidemic.**

4. **Effective masks: N95, P95 and FFP2/FFP3.**

**Not to be used only for single use and should never be washed and reused.**

- **N95:** N95 Respirator mask.
- **N99:** N99 Respirator mask.
- **P95:** P95 Respirator mask.
- **FFP2:** FFP2 Respirator mask.
- **FFP3:** FFP3 Respirator mask.

**Table 1: Showing differences between different respirator masks**

<table>
<thead>
<tr>
<th>Mask Type</th>
<th>Material</th>
<th>Filtration Capacity</th>
<th>Use Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>N95</td>
<td>Non-woven</td>
<td>95%</td>
<td>Medical, Industrial, Emergency situations</td>
</tr>
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<td>N99</td>
<td>Non-woven</td>
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<tr>
<td>P95</td>
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<tr>
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<td>Non-woven</td>
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</tr>
</tbody>
</table>

**Table 2: Differences between Valve and No valve N95 masks**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Valve N95</th>
<th>No Valve N95</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breathing difficulty</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Resistance to sinuses</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**Valves are not recommended except in specific cases.**

5. **Proper care and reuse of face masks**

- **Air drying:** 72 hours (3 days)
- **Ultra violet rays:** 15 minutes
- **Microwave:** 1 minute

**Respirator masks are certified into N, R or P depending on their ability to offer**

**Remember hand hygiene is equally important and this should not be neglected**

6. **WHO guidelines for mask use**

- **Gloves:** Should be worn when putting on and removing the mask
- **Face shield:** Recommended for healthcare workers
- **Eye protection:** Recommended for healthcare workers

**Figures:**

1. **Figure 1:** Showing different types of masks
2. **Figure 2:** Showing simplicity of a surgical mask
3. **Figure 3:** Showing different types of respirator masks
4. **Figure 4:** A surgical mask
5. **Figure 5:** Showing reduction in transmission by different types of masks
6. **Figure 6:** Showing the importance of hand hygiene

**References:**

15. American Society for Microbiology (ASM). Personal protective equipment. Available at: https://www.asm.org/topics/coronavirus/ppe
17. National Institute for Occupational Safety and Health (NIOSH). Consumer information on N95 respirators. Available at: https://www.cdc.gov/niosh/topics/n95/default.html