Information Sheet for Patients using CPAP or BPAP during COVID-19 Outbreak

The Sleep Medicine Service at Intermountain Healthcare is providing an information sheet for our patients who use any form of positive airway pressure (PAP) therapy (such as CPAP, BiPAP, VPAP, ASV, AVAPS, iVAPS) during the COVID-19 outbreak. This sheet informs you what should be done if you have or are suspected of having the virus. This is a rapidly changing situation, and recommendations may change. We will try to update you as we learn more.

1. **PAP provider**

   It is more important than ever to know your PAP provider company and your settings. It is advisable to put that information on your machine (i.e. with sticker). The manufacturer (Respironics, ResMed, Fisher Paykel, etc.) is not your PAP provider. Your PAP provider is the person or company that provides your masks, tubing, humidifier chambers and filters.

2. **There are some uncertainties, but we recommend that you follow approved cleaning instructions provided by the manufacturer of your machine**


   b. From Phillips:  [https://www.usa.philips.com/c-e/hs/better-sleep-breathing-blog/better-sleep/keeping-it-clean-cpap.html](https://www.usa.philips.com/c-e/hs/better-sleep-breathing-blog/better-sleep/keeping-it-clean-cpap.html)

   c. The FDA does **NOT** recommend the use of alternative cleaning devices that are commercially available (those that use ozone or ultra-violet light); in addition, use of such devices may void the warranty on your PAP device

3. **Below are general cleaning instructions commonly recommended by sleep specialists**

   a. Follow manufacturer (Respironics, ResMed, Fisher & Paykel, etc.) recommendations for cleaning your device (see above links).

   b. If you clean and wash your supplies with vinegar and water (1-part vinegar:9 parts water), make sure to rinse at least 3-5 times to get rid of any residue which might irritate the lungs. Dry both the machine and the humidifier completely.

   c. Cleaning with soapy water is also OK but the lanolin and scents in the soap may cause irritation; it is important to only use a small amount of soap, then rinse equipment well.

   d. Humidifier – ideally, should be used with distilled water.

      i. If using tap water, boil a quart at a time for 5 minutes to sterilize it, then allow it to cool and place it into a clean container. Dry humidifier out after use in the morning and let it be dry for at least 4 hours prior to reuse.

      ii. Even if you do not use distilled water, calcium deposits will be reduced by cleaning with vinegar and water.
iii. If you cannot get or do not use distilled water in your chamber, you may be able to replace your humidifier chamber from your PAP provider company if calcium or other elemental deposits from hard water build up (these do not represent infection or fungus).

4. If infected with COVID-19

a. In addition to information outlined above, please review the CDC guidelines regarding cleaning and disinfection (https://www.cdc.gov/coronavirus/2019-ncov/infection-control/index.html)

b. Early after you are infected, you may spread the virus to others even if you do not have symptoms. There may be increased risk of transmission of COVID-19 to others in the environment if PAP is continued.
   1. Consider others who may live with you, especially if they are at risk for severe infection. Dispersion of the virus with PAP is theoretically greater with than without PAP.
   2. Some patients cannot sleep/breathe without using PAP therapy. If you fit in this category, consider the following:
      a. You should stay and sleep in a separate room from your family. Close your bedroom door. Use a separate bathroom, if possible. Always clean the bathroom after you use it.
      b. Keep your filters clean and the humidifier dry when not in use.
      c. Consider taking cough suppressants to help reduce your cough at night.
      d. Clean out the mask if you wake up sneezing. In the morning make sure to clean out and dry the mask and machine as above.
      e. Try to set the machine for an auto-ON and auto-OFF to reduce the time that the mask and the machine are blowing into the room rather than your nose and face. This applies to both CPAP and BPAP.
      f. Upon recovery from COVID-19 or other respiratory infections, it is advisable to replace the filters, mask, tubing and humidifier chamber, given the uncertainty regarding the possibility of re-infection.

3. What are the risks of discontinuing PAP therapy?

a. Sleep apnea is a chronic disorder, and the risk of stopping PAP therapy for a short time until no longer contagious may be manageable.

b. Some patients may experience an increase in health risks in the short-term, such as accidents, safety incidents, falls or cardiovascular events.

c. Some patients should not drive if sleepy when not on therapy. Others may need to coordinate care with their physician if other medical problems worsen, such as high blood pressure.

d. Avoiding sleep on your back, sleeping with her head elevated, limiting alcohol or sedating medications, and treating nasal congestion may be effective for some patients.

e. Some patients may use an oral appliance.
4. If the decision is made to continue PAP in a patient who has confirmed COVID-19, or is suspected of having COVID-19, the patient should be advised to maintain strict quarantine and consider strategies for protecting household contacts.

5. If you are hospitalized:
   a. Take a copy of your PAP settings if you have them
   b. If you have COVID-19, most hospitals will not allow you to use your personal PAP device.
   c. If you are severely ill, your doctors will make the decision for the best therapy for you at the time.