



## Various Rehab Strategies Can Help COVID Patients Recover

We have learned over the last year how COVID-19 attacks the body and mind leaving an individual debilitated, weak and possibly with cognitive decline. The good news, though, is that rehabilitation efforts including physical, occupational and speech therapies seek to restore the whole person and help individuals resume previous quality of life.

While approximately 81 percent of people experience mild to moderate COVID symptoms and recover without intervention, 14 percent will develop severe symptoms that can last several weeks or months. Still others will also go on to develop “long COVID,” which occurs when symptoms last for weeks or months after the initial infection. Common impairments include weakness, fatigue, shortness of breath with activity and difficulty with walking and performing daily tasks like dressing, bathing and household chores. These symptoms can also lead to chronic stress which negatively impacts cognition.

The good news is that rehabilitation can help! Early intervention through exercise and activity aimed at treating the whole person will play an important role in the recovery process and can even be started at while in the hospital or other setting while in isolation. In fact, in a recent study presented by the Association of Academic Physiatrists, it was noted that low-level COVID-19 patients with multiple comorbidities who received physical therapy had a lower rate of mortality (12 percent) compared to those patients who did not receive therapy (25 percent) suggesting that physical therapy is a safe and effective treatment intervention for every COVID case.

### **How can the rehabilitation team help?**

First, therapy can help individuals to get moving again. There are five aspects of movement that therapy can address – deep breathing, addressing vestibular dysfunction, re-engaging large muscle groups, building strength and improving endurance. Let’s look at each of these in a little detail.

- Deep breathing involves filling the lungs from the bottom to the top. Therapists teach pursed lip breathing and deep breathing. These are particularly helpful for people who have lung conditions that make it more difficult for them to breathe. These techniques are designed to make breaths

more effective by making them slower and more intentional; it gives an individual more control over their breathing.

- The vestibular system controls balance and sensory input from the body and is turned on by moving our head and eyes. We engage the vestibular system through movements like head nods, head rotations, rocking while sitting or standing, and normal everyday movement like rolling in bed, standing up and sitting down – all of which therapy can facilitate with individuals post-COVID.
- Strength and endurance can be significantly limited post-COVID. To that end, therapists can design an individualized exercise program that incorporates the large muscles of the legs and back, the arms, and the trunk. Exercises like marching in place, walking, reaching, and bending can work to strengthen the large muscle groups that are deconditioned. Additional exercises like bicep curls with weights, shoulder movements, simple calisthenics, and activities that raise the heart rate can improve endurance and reduce fatigue with the goal of resuming previous routines and activities.
- Therapy may also suggest flexibility and stretching exercises, balance exercises, inspiratory muscle training, or a home exercise program.

As individuals return to daily activities, they may find them more difficult or challenging. This is another area where therapy can help. As part of the evaluation, an individual will perform a task such as bed-making or washing the hands and face and the therapist can determine how much effort is required to perform the tasks and there is any shortness of breath. The therapist will monitor heart rate, breathing rate, oxygen saturation, and any ineffective breathing patterns.

At that point, therapy will likely suggest activity adaptations and energy conservation strategies so individuals can accomplish daily activities without fatigue, pain, or shortness of breath. So, how do you conserve energy?

- Plan activities for the day.
- Pace yourself.
- Take rest breaks during and between tasks to give your body a chance to recover.
- Use breathing exercises.
- Sit during tasks and activities.
- Minimize arm movements.
- Avoid movements that involve bending, reaching, and twisting.

Therapy can also teach specific ways to position the body to help with decreasing the work needed to breathe and help with ventilation.

There are many roles for therapy post-COVID including pain management, teaching strategies to promote relaxation, cognitive retraining, addressing psychosocial needs, safety and fall prevention, and techniques for management of anxiety and panic attacks. Therapy, in assessing an individual will consider not only the things they MUST do, but also things they would LIKE to do. This is the holistic nature of the rehabilitation team as a partner in care. Your therapy partner has the tools and knowledge to facilitate function in your residents during an acute state of COVID and beyond. Seek their expertise!