

## Diaphragmatic Breathing Exercises for post-COVID-19 Diaphragmatic Dysfunction (DD)

**Status:** Recruiting

### Eligibility Criteria

**Sex:** Male or Female

**Age Group:** 18 years and over

This study is NOT accepting healthy volunteers

**Inclusion Criteria:**

- age 18 and above - PCR positive 4 weeks prior to the development of the respiratory symptoms - new diagnosis of PASC (new-onset symptoms of fatigue, shortness of breath, chest tightness or persistence of symptoms 4 weeks following a positive PCR test for COVID-19) - did not need hospitalization of 5 days or more and did not need ICU admission - nose breathers - symptoms include shortness of breath, chest tightness, and fatigue

---

**Exclusion Criteria:**

- pre-existing lung disease such as COPD, IPF, Asthma, Exercise induced Asthma, Lung cancer, or history of Lung transplant - history of current smoking and pack years of 10 - history of coronary artery disease - general anxiety disorder - unable to have full range of motion of the shoulders - on antidepressants prior to covid-19 infection - women who are pregnant - unable to read and speak English - previously diagnosed severe cognitive deficits such as dementia, developmental defects - acute medical conditions, psychiatric disorders such as schizophrenia, mania, and psychosis, neurologic disorders such as stroke, Parkinson's disease and Multiple sclerosis

### Conditions & Interventions

**Conditions:**

Respiratory System

**Keywords:**

COVID-19, shortness of breath

### More Information

**Description:** There is evidence that dysfunction of the diaphragm following COVID infection that leads to the shortness of breath and chest tightness. The diaphragm is the main muscle of respiration. This study involves muscle stretching of the diaphragm and associated muscles to improve the quality of respiration. Half of the participants will receive PT twice a week, for 12 weeks, for 1 hour (in person) and a half hour via telehealth. A control group will undergo traditional treatment as recommended by your provider.

**Study Contact:** Akhila Sridharamurthy - [asridhar@umn.edu](mailto:asridhar@umn.edu)

**Principal Investigator:** Farha Ikramuddin

**IRB Number:** STUDY00017641

---

Thank you for choosing StudyFinder. Please visit <http://studyfinder.umn.edu> to find a Study which is right for you and contact [sfinder@umn.edu](mailto:sfinder@umn.edu) if you have questions or need assistance.