

**LONG COVID March 24, 2025**



In the New England Journal of Medicine, an article was published Long Covid Defined, authored by Ely, Brown, and Fineberg et.al; July 31, 2024. They describe how the COVID-19 pandemic was a dangerous acute outbreak of infection that killed more than one million people in the United States and seven million worldwide. However, more importantly, they emphasized that after the pandemic, there were many millions of people who were left with many chronic disabling symptoms which are termed "Long Covid". There have been various estimations of the incidences of Long Covid as high as 10% of adults with the virus and 2% with the vaccine have been quoted. The New England article states that a survey lists numbers of 7% of adults and more than 1% of children, and this can number up to 50 to 20 million and 60 million globally with this Long Covid syndrome.

A Long Covid definition by a committee was formulated in this article and put forth. Cognitive impairment and neuromuscular problems, depression, and severe fatigue were hallmarks of the syndromes. The committee did not find a standardized guideline for a developing disease definition. They used a multiphase process of systemic engagement and information gathering and included focus groups, questionnaires and so forth.

The committee stated that long Covid is an infection-associated chronic condition that occurs after the SARS-CoV-2 infection and is present for at least three months as a continuous, relapsing, and remitting or progressive disease state that affects one or more organs. They go on to say that it can affect the individual in multiple ways. Shortness of breath, cough, and persistent fatigue, along with post-exertional malaise, difficulty concentrating, memory changes, recurring headaches and lightheadedness, fast heart rate, sleep disturbance, problems with taste and smell, bloating, constipation, and diarrhea are common symptoms. These are symptoms that we see very commonly in people with dysautonomia or autonomic dysregulation syndromes, that is, abnormalities of the autonomic nervous system involving either or both branches, the parasympathetic and sympathetic systems.

Other viruses are known to cause these symptoms, including Epstein-Barr, enteroviruses, and so forth. The symptoms are not specific for Covid in a post-viral syndrome. However, the committee went on to state that singular multiple conditions, such as interstitial lung disease, low oxygen levels or hypoxemia, heart disease and arrhythmias, strokes and blood clots, kidney disease and racing heart rate when standing (postural orthostatic tachycardia syndrome), and other forms of dysautonomia and chronic fatigue-type syndromes can be present. They discussed fibromyalgia, connective tissue disease disorders, hyperlipidemia, diabetes, and autoimmune disorders, such as lupus, rheumatoid arthritis, and Sjögren's disease. They even discussed mast cell activation syndrome as being operative in a long Covid syndrome.