What is long Covid? Following initial Covid-19 infection, a significant proportion of people continue to experience new, recurring, or ongoing symptoms and health problems that persist from several weeks or months to years. It is a multifaceted syndrome that can affect nearly every organ system, including respiratory, cardiovascular, metabolic, musculoskeletal, pulmonary, gastrointestinal, nervous, and regulatory processes. Long Covid can disrupt people’s ability to work or participate in their daily lives.

How many people have been affected by long Covid? It is estimated that between 10 and 51 percent of people who had Covid-19 develop long-term health impacts or long Covid, including people who had mild, asymptomatic, or moderate illness with their initial infection.

What are the symptoms of long Covid? Symptoms of long Covid can range from severe fatigue, cognitive dysfunction, and memory loss to difficulty breathing and heart palpitations. More than 200 different symptoms are associated with long Covid but not everyone will experience the same set of symptoms.

A history of Covid-19 infection can also result in higher risks of chronic disease development in the year after infection: new-onset diabetes by 40 percent, stroke by 52 percent, heart failure by 72 percent, twice the risk for impaired lung function and damage to other organ systems. Studies have also found that Covid-19 can lead to long-term immune dysfunction or injury, damaging the cells in the body that are needed to fight infections in ways that make more severe disease with other infections more likely.
4 **What causes long Covid?** The causes of long Covid are not yet known. Some of the possible underlying mechanisms include persistent viral reservoirs in certain tissues that could be triggering chronic inflammation, autoimmunity triggered by Covid-19 infection whereby the immune system mistakenly attacks healthy tissues, and reactivation of pre-existing viral infections such as Epstein-Barr virus infection. Scientists are actively investigating causes of long Covid.

5 **Is long Covid only associated with symptomatic infections?** Long Covid is not predicated on the severity of symptoms or disease with initial infection. Even asymptomatic and mild infections can result in long Covid.

6 **Which age groups are most affected by long Covid?** Long Covid can occur among previously healthy individuals, across all age groups, including young adults, adolescents, and children.

7 **Does the risk of long Covid increase with reinfections (multiple Covid-19 infections)?** The risk of long Covid increases significantly with each Covid-19 reinfection. One study found that each subsequent Covid-19 infection, regardless of disease severity, contributes to twice the risk of all-cause mortality, three times the risk of hospitalization, and twice the risk of long Covid at six months after reinfection. Covid-19 reinfections can also additionally worsen the risk for diabetes, gastrointestinal, kidney, mental health, musculoskeletal, and neurologic disorders.

8 **Do Covid vaccines prevent long Covid?** While Covid-19 vaccines are both critical and effective at preventing severe disease, hospitalization, and death, they prevent neither transmission of the virus nor long Covid. Studies from 2020-21 have found a slight reduction in long Covid risk with vaccination, but it is unclear how new variants that are more immune evasive and longer time since vaccination/boosting will impact vaccine protection against long Covid.

9 **Do antivirals prevent long Covid?** Covid antiviral medications do not fully prevent long Covid and have only been found to reduce the risk of developing long Covid by 25 percent in older adults.

10 **How can I prevent long Covid?** There is no long Covid without Covid-19. The only proven way to prevent long Covid is to prevent infections and reinfections. Preventing long Covid requires a multilayered approach to infection control, including universal masking in public spaces, staying at home when sick, getting vaccinated, getting tested when exposed or experiencing symptoms, and implementing optimal workplace protections for nurses and other frontline workers.

For more information: www.nationalnursesunited.org/covid-19