

# COVID-19 vaccination, disease severity and practice when COVID turns from endemic to epidemic disease

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## Abstract

The most significant global public health issue is still COVID-19. Due to the advent of a new variation and the widespread use of COVID-19 immunization, the disease is currently not as severe as it was in 2020. The immunization is still required, though. Here, the authors examine and offer suggestions for COVID-19 immunization as the illness transitions from an epidemic to an endemic condition.

**Keywords:** COVID, Endemic, Vaccination

## Introduction

Since the beginning of 2022 until the Omicron Gen 4, Gen 5 in the middle of the same year, COVID has been chasing the Wuhan original strain over the previous three years. Omicron has a large number of subspecies until reaching the last stage, when it will likely turn into “seasonal disease,” during which the disease’s intensity will decline. Regarding the current COVID circumstance Incomplete or non-vaccinated patients are the ones who are sickest. If receive a booster shot for longer than 3 months, the booster shot is still crucial, since it can lessen the likelihood of infection and the severity of the illness.

## Change in Severity of COVID

The severity of COVID has always decreased with many factors:

1. Virus evolution for survival: In order to coexist with humans, the virus has evolved to become less virulent. Because the virus cannot survive if it causes violence or death. The development of old vaccines, such as the polio vaccine, and virus attenuation will cause the virus to incubate indefinitely. The virus will weaken and change genetically over time, and it will then be used as a vaccine. The same is true for COVID. When HIV infects humans for a long time, genetic changes occur that reduce the severity of the infection over time. The global death rate has dropped from 3-5% to around 1%, or less than the WHO’s reported figure. In contrast, the World Health Organization’s reported number of deaths and infections will be revealed. The actual number of infections is much lower. As a result, true mortality will be significantly lower. Thailand’s death rate has dropped from 1% to less than 0.1%, and it should be no different in healthy people than influenza.

2. Many people are expected to account for 70% or more of the population. It was estimated that more than 70% of the population, or approximately 50 million people, had been infected, and that the majority of the population had received at least two doses of vaccine, resulting in hybrid immunity, which can prevent infection better than a vaccine or infection alone and has proven to reduce the severity of the disease regardless of whether it mutates into XBB. 1.5.

3. Vaccines cannot prevent infection on their own. At the same time, vaccines, such as mRNA vaccines, induce a higher level of immunity than infection, putting greater pressure on the virus to elude the established antibodies in order to survive. As a result, mutations occur throughout the

process. In general, when there is pressure, the virus tries to avoid it, according to evolution. As a result, the vaccine's extremely high immunity is unable to prevent infection at all. However, in some cases, the immune system can help to reduce the severity of the disease.

In summary, more than 70% of the infections in our home have been vaccinated, and more than 80% of the two vaccine doses have been administered. As a result, the majority of the population has hybrid immunity, which can also reduce disease severity. Despite the fact that the new mutant infection XBB.1.5 is on its way (it is currently the main species in America).

### **What Should Happen if COVID-19 Becomes an Endemic Disease?**

COVID-19 completes its mission by becoming a seasonal disease. The COVID-19 disease is still present. And it will almost certainly result in the disease becoming seasonal. Counting the number of infected patients is pointless after the fourth year, because the reported numbers are much lower than reality. More than 70% of infections, or roughly 5 billion people, should now be present on a global scale. The reported number of infections worldwide is nearly 700 million people, which is roughly ten times lower than the actual number. To reap long-term benefits from COVID-19, it is still critical to emphasize the critical need to support citizens' voluntary vaccination endorsement [1]. The World Health Organization (WHO) will most likely stop counting once the outbreak in China has subsided. Because the majority of them are already infected, the disease's severity has always decreased. More than 80% of those who died were elderly and had pre-existing medical conditions. There will be no returning to close the house and the city.

The market for vaccines, particularly mRNA, should be for buyers. The vaccine has a short half-life. Furthermore, one bottle still contains seven to ten doses, making it difficult to use, to have the least amount of loss while also being costly. There is the possibility of complications. In comparison to the severity of the disease, the vaccine used in the past and in the future. Access is difficult for developing countries. When you enter a seasonal disease, you no longer need to inject every 4-6 months. The vaccination will only be administered once a year. Because scheduling appointments for people to inject at the same time to reduce vaccine loss will be more difficult, particularly for the short-lived vaccine. Storage is difficult; since using negative temperatures will increase the cost. It is even more difficult to find a vaccine that matches the species because development is expensive, and once developed, the virus changes species. We should wait and see how many countries use various types of vaccines and their effectiveness in reducing violence in the near future, or how it died... when most countries were infected. It will be a look back at previous lessons.

Currently, it is thought that in each nation, more than 70% of infections have been infected to date, perhaps 80%, leading to natural immunity along with vaccine immunity in nearly all populations. Vaccinations are given once a year, if necessary, to high-risk groups. In the tropical region, influenza, which has an epidemic season during the rainy season or during the first semester of school in June, uses the same amount of vaccine year. Consequently, the yearly vaccine to prevent epidemics, should be completed before the rainy season. Additionally, if COVID-19 develops winter seasonality in the non-tropical zone, it is hoped that SARS-CoV-2 vaccinations will only

need to be reviewed annually to see if modifications are required. Additionally, if COVID-19 develops winter seasonality in the non-tropical zone, it is hoped that SARS-CoV-2 vaccinations will only need to be reviewed annually to see if modifications are required. The conditions at the moment would determine who should receive the booster, according to the recommendations [2].

### **Conclusion**

Planning for the administration of COVID-19 vaccine as a seasonal vaccination is required as the sickness shifts from an epidemic to an endemic condition. It might be connected to the recommended vaccinations, such the yearly flu shot.

### **Conflict of Interest**

None.

### **References**

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