



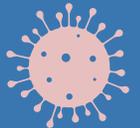
-Epilepsy & Covid-19 Vaccination-



What is Epilepsy?

Epilepsy, also known as seizure disorder, is a neurologic condition that predisposes a person to have recurrent seizures. About 3.4 million people in the United States have epilepsy. Patients with epilepsy take anti-seizure medications that have to be taken every day.

Are People with Epilepsy at Higher Risk for Covid-19?



COVID-19 is a worldwide pandemic that has killed about 440,000 people in the United States so far. While anyone can develop severe disease with COVID, the elderly and people with underlying medical conditions which suppress immunity are at the highest risk. There is no strong evidence thus far that people with epilepsy are at high risk for severe disease due to COVID.

Am I Eligible to be Vaccinated?

On December 11, 2020, the U.S. Food and Drug Administration (FDA) approved the use of vaccines for the prevention of COVID-19 in individuals 16 years of age and older. The current vaccines reduce the risk of getting COVID-19 infection by up to 90%, depending on the vaccine.

The CDC Advisory Committee in December 2020 recommended different phases or tiers on Allocation of COVID-19 vaccine, which are as follows:*



*These phases are merely CDC recommendations. Actual allocation will be determined by individual state authorities.



I HAVE EPILEPSY, SHOULD I GET VACCINATED?



While there are no national guidelines, neurologists and epilepsy specialists recommend patients with epilepsy to receive COVID-19 vaccine for several reasons:

- 1 For patients with epilepsy, the risk of COVID-19 infection and potential complications far outweighs the risk of side effects from a COVID-19 vaccine. No current evidence suggests that having epilepsy is specifically associated with a higher risk of side effects from a COVID-19 vaccine.
- 2 Risk of COVID-19 vaccine interacting with anti-seizure medications is very low. This is because vaccines work differently than compared to most anti-seizure medications and typically do not suppress the immune system. A few people who have seizures as part of another medical condition may be prescribed medications that can weaken the immune system, like steroids or everolimus (medications taken by people with tuberous sclerosis complex). If patients are taking these medicines, they must speak to their doctor for advice before COVID-19 vaccination.
- 3 Like with other vaccines, a fever can develop after a COVID-19 vaccination. This could lower the seizure threshold in some people, especially patients who have a breakthrough seizure with a fever. Over the counter medications for fever, such as acetaminophen or ibuprofen, taken for 24-48 hours after the vaccination (or for the duration of fever) may minimize this risk. The most common side effects after the COVID-19 vaccinations are muscle aches, chills, fatigue, headache, or a mild sore throat; these side effects typically do not cause a breakthrough seizure.
- 4 Thus far, COVID-19 vaccination has not been approved in pregnant women or lactating women. Therefore, if a patient with epilepsy is pregnant or breastfeeding, they will have to check with their neurologist and OBGYN, or their child's pediatrician before receiving the vaccine.
- 5 If patients with epilepsy have had allergies to prior vaccines (such as flu vaccine), have an ongoing infection during the time of vaccination, or are taking immunosuppressant medications for another condition, then they should discuss with their neurologist/primary care provider before receiving the COVID-19 vaccine. If patients with epilepsy have had an allergic reaction to the first dose of COVID-19 vaccine, or have allergies to any ingredient in the vaccine, then they should not get the COVID-19 vaccine.

Due to the above mentioned reasons, COVID-19 vaccine **is recommended** for the majority of patients with epilepsy. If patients have any questions or concerns, they should reach out to their neurologist or epilepsy specialist.

Authored By: Dr. Sally V. Mathias, M.D. ● JAN 2021

Dr. Sally V. Mathias, MD, specializes in the care of adults and adolescents with epilepsy. She is an Assistant Professor of Neurology at University of Kentucky in Lexington, KY. Within epilepsy, her interests are women's epilepsy and epilepsy surgery.