

# The COVID-19 Vaccine and the Delta Variant

The **COVID-19 vaccines** can protect you from getting sick. COVID-19 vaccines work with your body's immune system to fight the virus, and are the best way to lower your risk of getting COVID-19 and any variants (1).

### Protects others from getting sick.

The elderly and those diagnosed with high-risk medical conditions are more likely to encounter severe, or fatal COVID-19 illness (2). If you get a COVID-19 vaccination, your immunity creates an invisible barrier, which helps to protect the most vulnerable, and children under 12, who are not eligible for the vaccine.

### The more people who get the COVID-19 vaccines the greater possibility to return to normalcy.

The COVID-19 pandemic has caused worldwide shutdowns and cancellations of sporting, work, school, religious, and family-related social and recreational events. Reaching a 70%-90% vaccination level within the general population (i.e. reaching the herd immunity level) is the quickest and most effective method to return to normalcy. Each vaccination gets the United States one-step closer to normalcy. Choose to be a part of the solution—the problem.

### Vaccine hesitancy can increase the spread and prolong the pandemic.

Until the virus is completely eradicated (a point in time, when there are no active COVID-19 cases), the virus will continue to mutate (change). Those with vaccine hesitancy are slowing the country's ability to reach a 70% - 90% vaccination level and are helping the virus by allowing it more time to mutate. In addition to the vaccines, mask wearing, hand washing, and social distancing should continue until the pandemic is over (1).

### App of the Month



The CDC Mobile application is now available on your smartphone. Automatic updates whenever device is online ensures the most up-to-date health news and information. Direct links to social media, text and email lets you immediately share the most interesting articles with friends and family. Whether you're a fan of the weekly MMWR articles or you have an interest in the Disease of the Week, the CDC Mobile app has something for you. (App of the Month is not endorsed by DBHDS Office of Integrated Health. User accepts full responsibility for utilization of app).

### What are variants?

Variants spread more quickly and cause more severe illness, which leads to more hospital admissions and more deaths. The variants could overwhelm hospitals and healthcare resources in Virginia, once again, if herd immunity (70%-90% vaccination) is not reached quickly (4).

### What is the Delta Variant?

People who are fully vaccinated against COVID-19 are also protected against the Delta variant. According to the CDC by the end of July 2021, the Delta variant was the cause of more than 80% of new U.S. COVID-19 cases.

### How to make the decision to get the COVID-19 vaccine?

Ask your primary care physician (PCP) for advice, ask lots of questions, and educate yourself about the COVID-19 vaccine, using reliable sources, so you can make the most informed decision about getting vaccinated.

### Questions to ask your Primary Care Provider if you are hesitant about getting the COVID-19 vaccine:

- Should I be vaccinated for COVID-19?
- Can the vaccine give me COVID-19?
- If I already had COVID-19 and recovered, do I still need to be vaccinated.
- Is it safe to get a COVID-19 vaccine if I have an underlying medical condition?
- Is it better to get natural immunity to COVID-19 rather than immunity from a vaccine?
- Why do I need two COVID-19 shots?
- Will the shot hurt or make me sick?
- Are there long-term side effects from COVID-19 vaccine?
- How do I know if COVID-19 vaccine is safe (3)?



#### References

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- (2) The Center for Disease Control and Prevention (CDC) (2021a, June) Benefits of Getting a COVID-19 Vaccine. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/vaccine-benefits.html>
- (3) The Center for Disease Control and Prevention (CDC) (2021b) Quick Answers for Healthcare Professionals to Common Questions People May Ask About COVID-19 Vaccines. <https://www.cdc.gov/vaccines/covid-19/downloads/healthcare-professionals-vaccine-quick-answers.pdf>
- (4) Virginia Department of Health (VDH) (2021, July) Variants of the Virus that Causes COVID-19. <https://www.vdh.virginia.gov/coronavirus/variants/#know>



### **Top 5 Things You Should Know about the COVID-19 Variants:**

1. Current COVID-19 variants of concern spread more rapidly and some cause more severe illness. Rapid spread could lead to more cases, more deaths, and could overwhelm hospitals and healthcare resources.
2. The more the COVID-19 virus circulates, the greater the chances that new mutations or variants can develop.
3. Variants of concern have been identified in Virginia and are likely more common in our communities than the number of reported cases suggest.
4. COVID-19 vaccines authorized for use in the United States are effective at protecting the American public from circulating variants of the COVID-19 virus.
5. Public health recommendations to slow the spread of the virus that causes COVID-19 will also work to protect us from these new variants. Until you are fully vaccinated, you should keep yourself and others safer by:
  - Wearing a mask that covers your nose and mouth when you are around people not in your own household, both indoors and in crowded outdoor settings.
  - Staying at least 6 feet apart from other people when possible.
  - Keeping away from large crowds and poorly ventilated spaces.
  - Washing your hands often.
  - Getting the COVID-19 vaccine.

### **Learn more about stopping the spread of COVID-19 variants in this World Health Organization (WHO) video:**

<https://youtu.be/01b-74ljqWc>

### **Link to variants of concern VDH**

**dashboard:** <https://www.vdh.virginia.gov/coronavirus/covid-19-data-insights/variants-of-concern/>

### **ABA Snippets ...**

#### **Resources for Behavior Graphing**

Graphical display by behaviorists is most frequently completed using a line graph format (3). In the October 2020 ABA Snippet, the importance and necessity of graphing behavioral data was outlined. The current ABA Snippet provides several resources for behaviorists that may be helpful in their graphical display and visual analysis endeavors. Readers that would like instructions on how to construct graphs using Microsoft Excel are encouraged to access resources on creating single-subject design graphs, several of which offer task analysis type approaches for learners (6) (8). Online tutorials are also available on basic clinical and more advanced research graphing as a supplement to the professional literature (1). Behaviorists with more extensive graphing experience may be interested in literature on more advanced graphing techniques (5), as well as learning about issues that can impact visual analysis and graphical quality (4) (7). A dedicated cohort of behaviorists' remains committed to the use of Standard Celebration Charts, which offer a standardized method of charting and understanding frequency accelerations and decelerations and is used in precision teaching (2). Lastly, there are a variety of behavior tracking and graphing downloads or applications, several of which are no or low cost, that readers can find via a basic web query on the topic.

Questions regarding ABA Snippets please contact our team at [nathan.habel@dbhds.virginia.gov](mailto:nathan.habel@dbhds.virginia.gov) or [sharon.bonaventura@dbhds.virginia.gov](mailto:sharon.bonaventura@dbhds.virginia.gov)

#### References:

- (1) ABA International (Volume 5, Summer 2012). BAP Supplemental Materials. <https://www.abainternational.org/journals/bap/supplemental-materials.aspx>
- (2) Calkin, A. B. (2005). Precision teaching: The standard celeration charts. *The Behavior Analyst Today*, 6(4), 207-215.
- (3) Cooper, J.O., Heron, T.E., & Heward, W.L. (2020). *Applied behavior analysis: Third edition*. Pearson Education, Inc.
- (4) Deochand, N., Costello, M. S., & Fuqua, R. W. (2017). Chart goals for behavior analysis. *Behavior Analysis: Research and Practice*, 17(1), 101-102.
- (5) Deochand, N., Costello, M.S., & Fuqua, R.W. (2015). Phase change lines, scale breaks, and trend lines using Excel 2013. *Journal of Applied Behavior Analysis*, 48(2), 478-493.
- (6) Dixon, M.R., Jackson, J.W., Small, S.L., Horner-King, M.J., Lik, N.M., Garcia, Y., & Rosales, R. (2009). Creating single-subject design graphs in Microsoft Excel 2007. *Journal of Applied Behavior Analysis*, 42(2), 277-93.
- (7) Kubina, R. M., Kostewicz, D. E., Brennan, K. M., & King, S. A. (2017). A critical review of line graphs in behavior analytic journals. *Educational Psychology Review*, 29(3), 583-598.
- (8) Vanselow, N. R., & Bourret, J. C. (2012). Online interactive tutorials for creating graphs with Excel 2007 or 2010. *Behavior Analysis in Practice*, 5, 40-46.

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