

May 14th, 2021

KEY TAKEAWAYS

- Cases, hospitalizations and deaths have dropped to their lowest numbers in many months in Virginia and the United States
- CDC published a report this week which confirmed that Virginia has performed well in COVID-19 vaccination initiation among older adults
- The number of vaccine doses administered each day is declining rapidly, with first doses dipping below 15,000 daily recently

12 per 100k

Average Daily Cases
 Week Ending May 9, 2021

80 per 100k

Potential Peak Average Daily Cases, Week Ending August 22, 2021 with B.1.1.7 Variant & Pandemic Fatigue

13 per 100k

2020 Summer Peak
 Week Ending Aug 2, 2020

68 per 100k

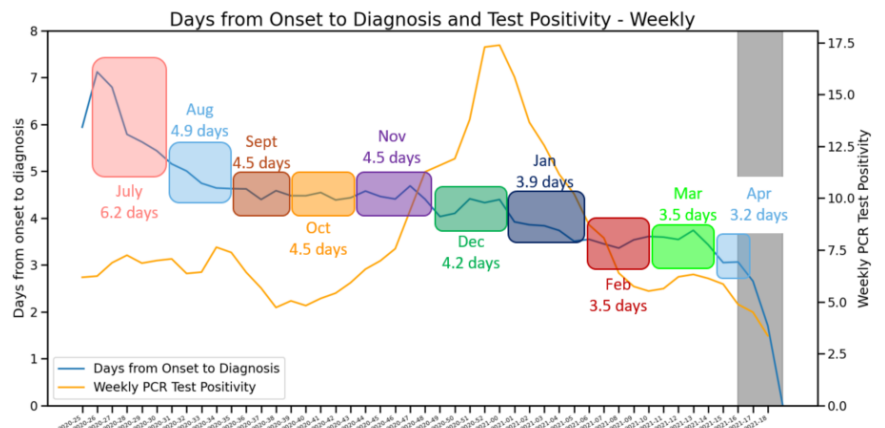
Highest Peak Average Daily Cases
 Week Ending Jan 24, 2021

KEY FIGURES

Reproduction Rate (Based on Confirmation Date)

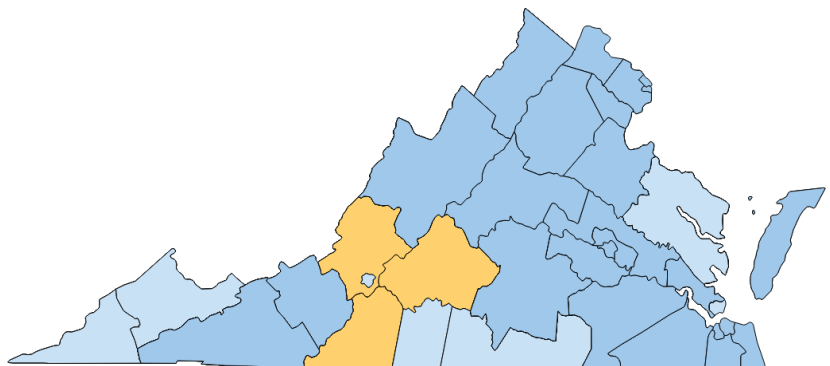
Region	R_e May 10	Weekly Change
Statewide	0.777	-0.095
Central	0.772	-0.131
Eastern	0.758	-0.133
Far SW	0.785	-0.094
Near SW	0.911	-0.031
Northern	0.847	0.076
Northwest	0.647	-0.311

Case Detection



Growth Trajectories: 0 Health Districts in Surge

Status	# Districts (prev week)
Declining	25 (24)
Plateau	7 (5)
Slow Growth	3 (6)
In Surge	0 (0)



THE MODEL

The UVA COVID-19 Model and the weekly results are provided by the UVA Biocomplexity Institute, which has over 20 years of experience crafting and analyzing infectious disease models. It is a (S)usceptible, (E)xposed, (I)nfectious, (R)ecovered epidemiologic model designed to evaluate policy options and provide projections of future cases based on the current course of the pandemic.

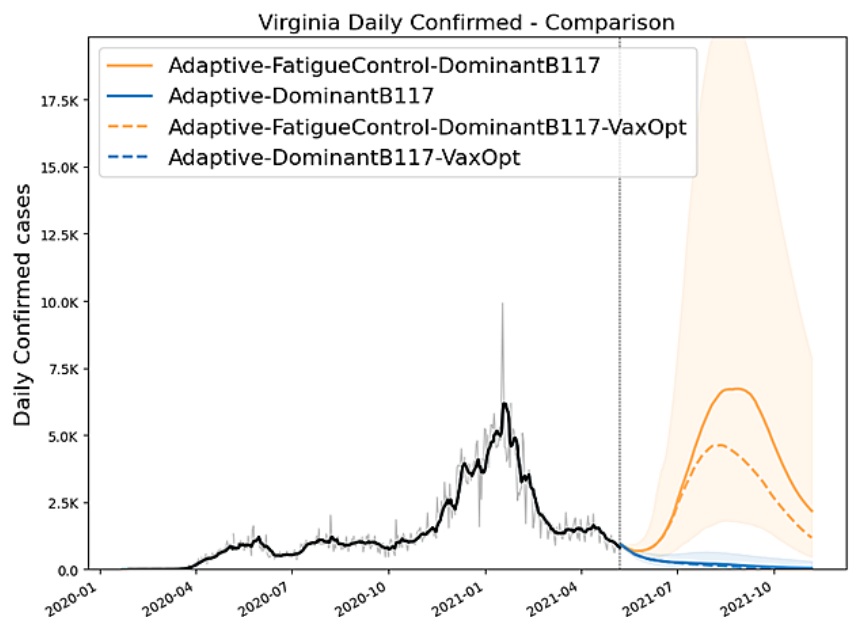
COVID-19 is a novel virus causing a global pandemic and response. The model improves as we learn more about it.

THE PROJECTIONS

The UVA team continues to improve the model weekly. The UVA model uses an "adaptive fitting" methodology, where the model traces past and current trends and uses that information to predict future cases at the local level. The model incorporates projections on the impact of vaccines, which will improve over time. Since the B.1.1.7 Variant has become dominant, the model includes increased transmission and severity associated with this Variant of Concern. The model also includes "what-if" or planning scenarios. The "Fatigued Control" scenario identifies the highest transmission rates seen during summer 2020 and projects those forward. The "VaxOpt" scenario compares the status quo vaccine acceptance levels to optimistic levels.

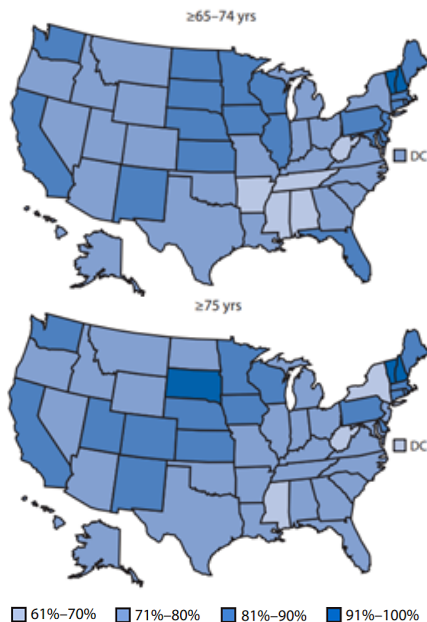
MODEL RESULTS

With the B.1.1.7 variant becoming predominant, the model shows a continued decline in new weekly cases along the current course, but warns of a surge in cases that could occur if Virginians relax precautions. Under the current course, model scenarios show that cases peaked at **68 average daily cases** per 100,000 residents during the week ending **January 24th**. However, under a worst case scenario, if Virginians relax their behavior for a sustained period as Variants of Concern take hold, cases could reach a higher peak with **80 average daily cases** per 100,000 the week ending **August 22nd**. To lessen the projected peak, we must give vaccines time to have an impact, especially as the B.1.1.7 variant is the predominant strain in Virginia. **Do your part to stop the spread. Continue to practice good prevention and get vaccinated when eligible.**



KEY INDICATORS CONTINUE TO IMPROVE ACROSS VIRGINIA

Things continue to look up across the Commonwealth, as COVID-19 case counts continue to drop. Average daily cases have dropped 28% over the last week to 7 per 100,000. Additionally, COVID-19 hospitalizations and deaths continue to decline. In the United States average daily deaths have dropped to 630 from highs of over 3,000 in January 2021.



State COVID-19 vaccination initiation rate of adults aged ≥ 65 years - CDC MMWR, May 14, 2021

Virginia Compared to the Nation

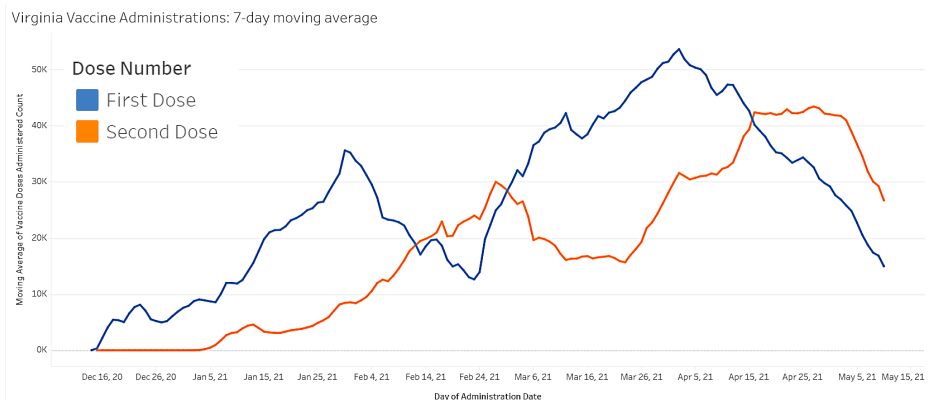
While both Virginia and the United States are seeing improvements, Virginia's case rate is lower. The average daily case rate in the Commonwealth has dropped to 7, whereas the average daily case rate in the US is 11 per 100,000 people, based on current data from the Washington Post. Virginia is also performing well with vaccine initiation among adults aged 65 and older. This week's CDC Morbidity and Mortality Weekly Report (MMWR) shows that 79.6% of Americans aged 65-74 years have received at least their first vaccine dose, along with 78.3% of those aged 75 and older. 80.0% of Virginians aged 65-74 and 80.4% of those aged ≥ 75 have received at least their first dose.

The Commonwealth's overall rate of vaccination initiation among adults aged ≥ 65 years (80.2%) is also faring well when compared to the nearby states of North Carolina (74.7%), Tennessee (70.5%), and West Virginia (69.2%). Additionally, among the total population, 47.6% of Virginians have received at least 1 dose and 36.3% are fully vaccinated, per VDH; whereas nationwide, 46.6% have received at least 1 dose and are 35.8% fully vaccinated, based on CDC data.

Vaccination Rates Slowing

Despite these successes, the number of vaccine doses administered is rapidly declining, with a greater decline in first doses than in second doses. Currently, Virginia averages 46,823 vaccine doses administered on a daily basis. This is a 15.4% decline from last week. The slowdown has occurred throughout Virginia, affecting regions with both high and low vaccine coverage. Northern Virginia, which has had the highest vaccination counts, has experienced the largest drop in daily doses administered, going from over 20,000 doses in April to around 7,500 in May. Prior to recent days, vaccine administrations last dropped below 50,000 doses was February 25th, 2021. In order to increase the number of vaccine doses administered, Virginia has been working to ramp up its outreach efforts.

As case counts get lower and lower - and states are further relaxing their restrictions, it's important that Virginians continue to practice healthy behaviors like social distancing, wearing masks, and getting vaccinated when eligible.



The number of vaccine doses administered per day in Virginia is rapidly declining