

July 16th, 2021

KEY TAKEAWAYS

- The Delta variant is likely dominant in Virginia, or will be very soon, creating increased risk for unvaccinated individuals and communities with low vaccination rates.
- First dose vaccinations have plateaued, and show early signs of rising during the first weeks of July, following earlier declines.
- Cases have ceased their decline in most health districts, and returned to growth in many. The statewide transmission rate is above 1.0.

4 per 100k

Average Daily Cases
 Week Ending July 11, 2021

32 per 100k

Potential Peak Average
 Delta Variant Scenario
 Daily Cases, Week Ending
 September 5, 2021

8,591

Average Daily 1st Doses
 July 4, 2021

4,095

Average Daily 2nd Doses
 July 3, 2021

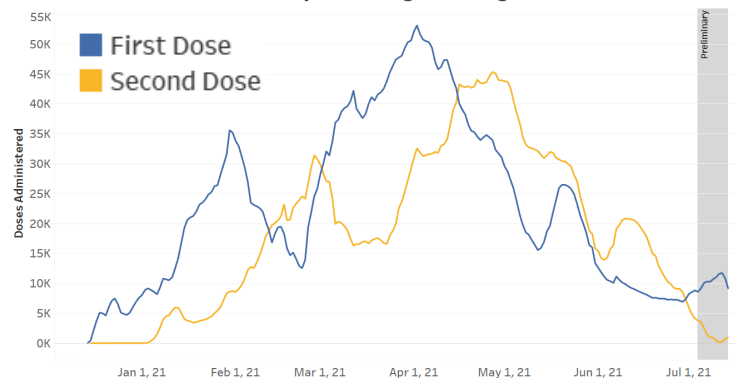
KEY FIGURES

Reproduction Rate (Based on Confirmation Date)

Region	R _e July 12th	Weekly Change
Statewide	1.047	0.185
Central	0.927	-0.164
Eastern	1.116	0.174
Far SW	1.002	0.033
Near SW	1.000	0.601
Northern	1.159	0.344
Northwest	1.075	0.073

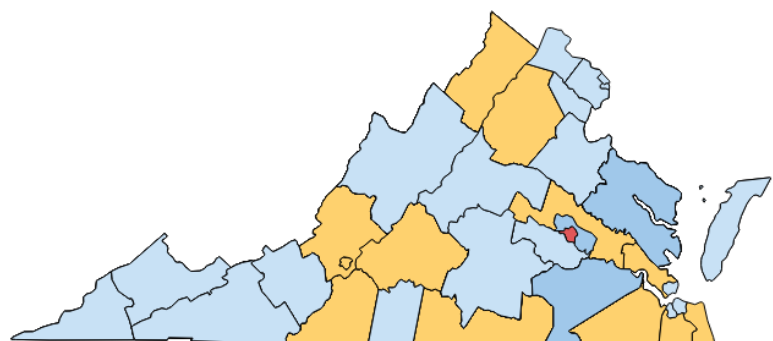
Vaccine Administrations

Average Daily Doses:
 7-day Moving Average



Growth Trajectories: 1 Health District in Surge

Status	# Districts (prev week)
Declining	3 (4)
Plateau	19 (30)
Slow Growth	12 (1)
In Surge	1 (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.

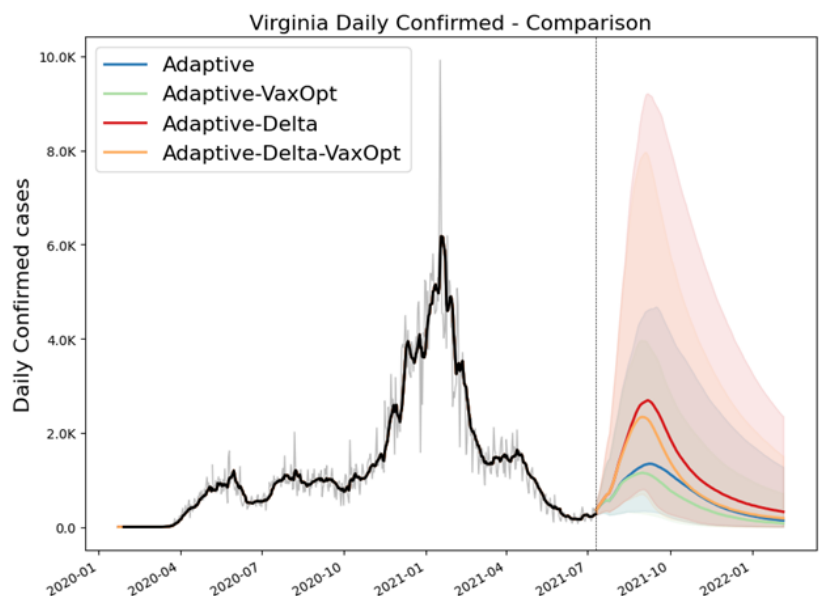
COVID-19 is a novel virus, and the variant mix changes constantly. The model improves as we learn more.

THE PROJECTIONS

The UVA team continues to improve the model. 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. Since the B.1.1.7 Variant has become dominant, the model includes increased transmission and severity associated with this Variant of Concern. The "Delta" scenarios adds the known effects of the Delta Variant of Concern to transmission rates. The model incorporates projections on the impact of vaccines, including current vaccinations and the stalled rate of vaccine uptake. The "VaxOpt" scenarios show the impact of vaccine acceptance increasing to 85% of the adult population.

MODEL RESULTS

With the Delta virus becoming dominant, the model estimates cases will return to growth through the fall, reaching levels not seen since April in mid-September. Vaccination rates are still below herd immunity levels and, with many Virginians returning to normal, the virus has room to run. If the Delta variant continues to spread, cases could peak at **32 average daily cases per 100,000 in early September**. To lessen the projected peak, we must give vaccines time to have an impact. If vaccination rates pick up, the model estimates that over 50,000 cases could be avoided. **Do your part to stop the spread. Continue to practice good prevention and get vaccinated when eligible.**



GLOBAL PANDEMIC STILL RAGING

With a successful vaccine rollout and summer weather causing a sharp decline in cases, many of us are ready to put COVID behind us. In May, the CDC [changed its guidance](#) for fully vaccinated individuals, indicating they could resume most activities without distancing and without masks. That [guidance](#) remains in place. More recently, the CDC [changed its guidance](#) for fully vaccinated students and teachers in [K-12 schools](#). While good news, there is one important caveat: it applies to fully vaccinated persons only. For unvaccinated individuals and those not yet fully vaccinated, however, the threat of COVID-19 remains as high as ever.

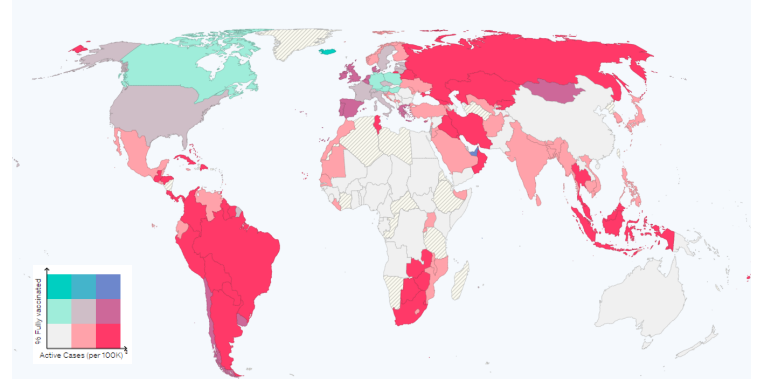
Global Race Against Variants

While cases in the United States have declined drastically, the global pandemic is still in full swing. Globally, [COVID deaths](#) in the first half of 2021 have topped the total for all of 2020. This disparity highlights the importance of vaccinations at this stage of the pandemic. Poorer nations, which tend to have [lower vaccination rates](#), have been [hardest hit](#) in 2021. During spring and early summer, South America [became](#) the [world's](#) hotspot for COVID-19 deaths. Cases have surged in Asia as well. Low vaccination rates are an important factor, but new variants are also driving COVID surges. The [Gamma](#) and [Lambda](#) variants are prevalent in South America, while the [Delta variant](#) has ravaged India and South Asia

COVID-19 vaccine distribution

Explore the rollout of COVID-19 vaccinations in comparison to the impact of cases.

How to read this chart Incomplete Data



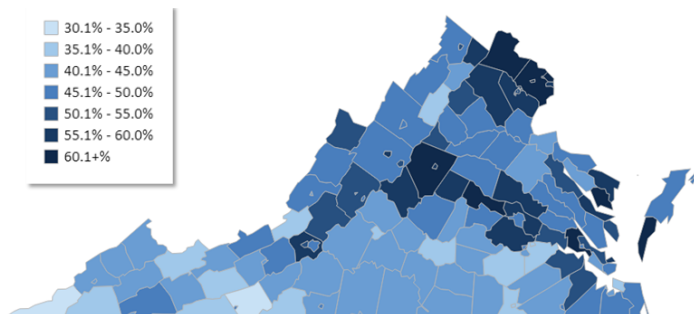
COVID-19 vaccines compared to active cases. Green coloring indicates high vaccination and low cases, purple, high vaccination and high cases, and pink, low vaccination and high cases. Much of the world is bright pink, showing low vaccination and high cases. Source: [McKinsey & Company COVID Response Center](#).

Vaccines vs Variants Closer to Home

With the Delta variant now dominant in the United States, the same pattern is playing out closer to home. Despite abundant vaccine supply, the nation fell [just short](#) of the President's goal of 70% of adults with at least one dose by July 4. Nevertheless, vaccination rates vary widely across the country. While 20 states, including Virginia, met the goal many have fallen far short. States in the [South and Midwest](#) have seen particularly low vaccination rates. These states [are now](#) seeing higher case rates.

Vaccine Rates in Virginia

Percent of Population with at Least One Dose



Similar to national patterns, there is wide variation in vaccination rates. Some counties, primarily in Northern and Central Virginia, have very high vaccination rates. Rates in South and Southwest Virginia are much lower. The Delta variant has become dominant in Virginia in the last couple of weeks. As it continues to spread, the UVA model shows that Virginia can expect the same pattern occurring globally and nationally. Delta will cause COVID surges in areas with low vaccination. In areas with high vaccination, outbreaks will occur among unvaccinated individuals but will have less room to spread. Do your part to stop the spread. Get [vaccinated](#) if eligible and practice [good prevention](#) until fully vaccinated.