

## The Greatest Possible Stimulus

After receiving the genetic sequence of the novel coronavirus from China, it took Moderna just two days (two days!!) to generate the sequence of the vaccine. In less than a month, they produced the first clinical batch of the mRNA-1273 vaccine that has now seen tens of millions of doses distributed. It moved through clinical trials at warp speed, going from idea, to FDA authorization, to shots in arms in less than a year. In short, it's a modern-day medical miracle.

The COVID-19 vaccines – Moderna, Pfizer-BioNTech, and Johnson & Johnson to name a few - are the key to unlocking sustainable growth in the economy. They are critical for ending restrictions that have devastated small and medium size businesses from coast to coast. And the effect of reopening is more impactful than the trillions of dollars the government has thrown at the economy (and the spending isn't over). Government spending is a Band-Aid, while reopening heals the root cause of our economic ailment. As the data shows, vaccine distribution is well under way. The rollout hasn't been perfect, nobody will argue that, but it is accelerating, and the economy is following suit.

[As we wrote earlier this month](#), we believe it's possible – dare we say likely - that the US can hit herd immunity in mid-to-late April. The ramifications for the US economy of plummeting cases, declining hospitalizations, and fewer lives lost to the virus can hardly be overstated. But the underlying details of the overall data are even more impressive.

So far, 82.1 million vaccine doses have been distributed with 65.0 million having been administered, and 44.5 million people having received at least one dose. That means 13.4% of the US population has some form of antibodies to COVID-19 through vaccination. And vaccine production is ramping up. Based on analysis from Bloomberg, the current delivery pace of 10 to 15 million doses per week is set to rise to 20 million next month, 25 million in April and May, and more than 30 million a week in June. We could move from 1.5 million shots administered per day to levels two to three times higher.

We all know COVID-19 has more severe health impacts on some groups than others. Those aged 65+ have accounted for over 80% of reported COVID-19 deaths, yet this group makes up only 16.3% of U.S. population. Narrow in on those aged 85+, and it's even more severe. They make up 31.6% of COVID-19 deaths but account for only 1.8% of population!

As we continue to roll out the vaccine, these groups are – and should be – prioritized. Based on the latest data from the CDC, 41.3% of those 65 years and older have received at least one dose of a vaccine, while 53.6% of those 75+ have received at least one dose. The accelerating pace of vaccinations give us the chance to have these groups heavily protected within the next few weeks. In fact, at the current rate of roughly 10 million vaccinations over the last seven days, the rest of those 65+ could get at least one vaccination within three weeks. For those over 75 it would only take seven days if that was the focus!

### People Who Have Received at Least One Dose of the COVID-19 Vaccine

Age	Share of Population
<18	0.0%
18-29	5.5%
30-39	9.3%
40-49	10.6%
50-64	12.0%
65-74	33.7%
75+	54.3%

Source: CDC.gov, census.gov, First Trust Advisors

And remember, the vaccine doesn't just make it less likely that you catch the virus, it also significantly reduces the severity of symptoms (and risk of death) if you do contract. By treating those most vulnerable, the health data is reflecting massive progress. From the peak, cases are down 73%, hospitalizations are off 56%, and daily deaths have declined 38%.

Let's take this one step further. Add the CDC estimate of people who have already been infected with COVID-19 (the latest data is from December so the numbers are a conservative estimate of where we stand today) to those who have already received at least one dose of vaccine, and the numbers are even more promising for the 65+ age bracket, with an estimated 57.9% having some form of antibodies. Yes, the CDC wants those who have had the virus to still get the vaccine, but it doesn't change the fact that their natural immunity has an impact on reducing spread.

Age	Estimated Infections	# with 1 or More Vaccines	Population	% Pop with Estimated Antibodies
0-17	17,552,452	27,596	74,660,000	23.5%
18-49	41,940,215	11,473,255	139,531,000	38.3%
50-64	14,447,134	7,677,938	64,105,000	34.5%
65+	9,039,683	22,820,674	54,303,000	58.7%
Total	83,111,629	41,999,463	332,599,000	37.6%

Source: CDC.gov, census.gov, First Trust Advisors

We are gradually seeing adoption of the reality that herd immunity could largely be here in just a few months. We expect more to follow as the data continues to improve. Math wins. It has been a long, sad, and destructive journey. Mistakes have been made, lessons have been learned, and as we reflect back on the response the grade is still pending.

Now the clouds are parting, and the vaccine has the light at the end of the economic tunnel drawing closer by the day. While more fiscal stimulus out of Washington is on the way, vaccines are bringing the kind of stimulus this nation really needs.