

Letter 35: Boosting

October 29, 2021

Dear Daughters,

This week your mother got her COVID-19 booster shot. As I got “boosted” three weeks ago, your parents are as safe as they’re going to get.

Get Your Booster Shot

I would imagine that booster shots will be made available to you girls sometime this winter; be sure and get them as soon as you can.

Do you really need a booster shot? You bet. The data now being released make it abundantly clear that the really effective mRNA vaccines, made by Pfizer and Moderna, tend to slowly lose their punch. By the sixth month, these vaccines offer far less protection to infection – although not to serious illness, as their T-cell immune protection seems more long-lasting.



Won't a booster also lose its effectiveness over time? Yep. I have little doubt that we will be getting annual COVID shots, much as we get annual flu shots. Gauging from what I am reading in journals, vaccine researchers will soon succeed in designing a vaccine directed against corona viruses generally. There is no reason to believe a general vaccine directed against all corona viruses will last longer than today's vaccine directed specifically against COVID-19, of course, but a general vaccine could be tweaked easily to better fit whatever COVID variant arises in any future year, much as we do today with the annual flu vaccines. I am no expert in vaccine development, but I'd bet apples to doughnuts we are looking at annual COVID boosters for at least the next few years.

Don't Forget to Get Your Flu Shot

With 743,050 COVID-19 deaths in the country over the last two years, it's easy to forget the other respiratory disease that seriously threatens us. Tens of thousands of Americans die of flu each year. Before COVID-19 arose in early 2020 and encouraged social distancing, flu was a major fatal disease in this country: over 34,000 Americans died of flu in 2019, and fully 61,000 in 2018. Globally, far more die, some 600,000 each year. Flu was, and is, a killer.

So get your flu shots right now, if you haven't already.

Mix and Match Boosters?

My initial COVID vaccination was with the Pfizer vaccine, and so was my booster. Your mother's initial vaccination was with the Moderna vaccine, so you might imagine she would have sought out a Moderna booster shot. However, the CDC is allowing those getting booster shots to select any approved vaccine. I urged her to get the Pfizer booster instead, which she did.

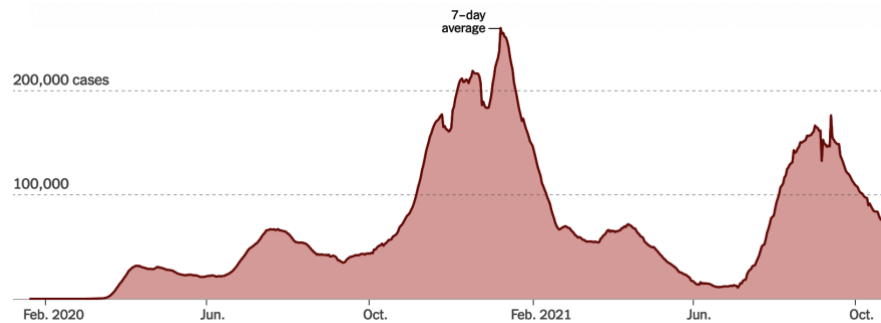
Why did I urge her to switch, when the two vaccines are actually very similar in composition and effectiveness? Because the Moderna booster being offered is a half-dose! The reason for offering only the half-strength 15-microgram booster is a mystery to me. Moderna's efficacy trials were carried out on both full-dose and half-dose boosters, so they must have had this half-dose policy in mind all along. I can only surmise that Moderna's profit is determined in some measure by the number of shots administered, and that the company's ability to manufacture the vaccine remains limited. If so, this policy decision by Moderna would potentially double the possible profit.

Too cynical? Perhaps. But Moderna – which had not brought a product to market before the pandemic – has received \$1.3 billion in federal funds to develop its vaccine, and billions more to expand its vaccine manufacturing capacity, execute trials, and produce shots. They are now vaccinating tens of millions of people, charging a hefty fee (\$15 to \$16.50 for each shot to the federal government; just under \$10 a dose to COVAX). I haven't heard any mention of Moderna returning any of the billions given to them by U.S. taxpayers, or any share of the more than \$30bn that revenue forecasters predict future Moderna vaccine sales will generate.

Be that as it may, when you girls become able to receive booster shots, I cannot think of any reason you should settle for a partial dose. I would urge you to go ahead and receive a full dose of COVID-19 vaccine. Get the Pfizer booster.

Things Are Getting Better

I have not written since the end of August. You all know what I have been up to since then – running around the coast of Maine with your mother and Paddington. The Delta variant had exploded to levels exceeding 150,000 cases a day when last I wrote. I was hopeful then about the future, estimating we were at or near the peak of the outbreak.



Well, I was right. August was indeed the peak. Levels of COVID-19 infection have been falling ever since. Today we are averaging about 72,000 new cases a day, roughly half as many as at the end of August. We still have a ways to go – 1,381 died today of COVID-19, five times as many as were being reported daily in June. But however grim the numbers we are still seeing, they continue to fall, and I remain hopeful.

Vaccinating the Kids

The FDA's advisory committee met this week and approved a request from Pfizer to allow their vaccine to be administered to 5-to-11-year-olds. Pfizer tested its vaccine in 2,268 young children, and reports the subjects developed levels of protective antibodies similar to those reported in 16-25 year olds, with no safety concerns. Pfizer is proposing a two-shot regimen of 10-microgram doses, a third of the amount given to adults, the two shots to be given three weeks apart. The FDA's approval will now be forwarded to the CDC for a final verdict. Dr. Fauci says that he is optimistic vaccines will be approved and widely available for kids ages 5 to 11 by early November.

This is great news. 78% of Americans ages 12 and up have already received at least one dose of COVID-19 vaccine. Adding 28 million young kids will increase this number to 86% of Americans. Once we get the nation's young kids vaccinated, we would seem to be approaching the vicinity of herd immunity. There certainly is no escaping the conclusion that it is getting harder and harder for a virus ejected in a sneeze to find a susceptible person to infect.

Now if only we can get parents to vaccinate their kids.

We Have Much to Be Thankful For

Although these are uncertain times, with much at stake politically in a riven nation, I wanted to end this letter stating how very grateful I am for all that life has granted our family. We are all of us healthy, we love and support each other, and we have the best dog in the world.



This is a photo taken last month of Paddington exploring the Maine seacoast just below our cabin. A merry soul with an inquisitive nose, she loves the “off leash” freedom of Acadia. For her, a dog’s life is perfect!

As you all know from walking her, Paddington’s favorite thing is to meet new people. She rushes to them, tail wagging. Paddington may be a small beast with fur, but she has a point. In a scary, stress-filled world, it is good to get out and sniff once in a while – especially new potential friends. Our family can’t always be on vacation (sorry, Paddington), but wherever we find ourselves we should take the time to enjoy other people, as Paddington does.

Paddington, your mother and I look forward to seeing all of you this Thanksgiving, when we can share sniffs, turkey and hugs.

Dad