Davis Square Family Practice COVID Newsletter #19 March 8, 2021



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We Will be Getting Our Second Doses - What This Means for Our Patients

Thanks to Pat Jehlen, our Massachusetts State Senator, we will be made whole regarding the second dose of the Moderna vaccine. I cannot tell you what an emotional relief it was to get that first call from Matt Hartman, from Senator Jehlen's office, late in the day on Thursday, March 4th. He had a very clear understanding about the disarray the messaging from Governor Baker's office to the DPH had led to small practices, like ours, having their promised second doses diverted to larger sites (in part, I suspect, so that Governor Baker could pad the amount of first shots

given to Massachusetts residents). Within less than 24 hours of Mr. Hartman's call, the situation had been rectified. Our entire staff had been so disheartened by having to add to the chaos that that state's vaccine roll-out had thrust upon us all. Many thanks from all of us to Senator Jehlen and her staff.

We have already received 200 of our second doses and will be getting the remainder shortly.

All currently scheduled vaccine visits are going to remain unchanged at this time. As always, we will be confirming all dates and times with you.

I am optimistic that we will be getting more first doses of vaccine by the end of the month as that is when the J&J vaccine is expected to be more widely available. This week's distribution of J&J nationwide was 'one shot' deal (no pun intended) and expended most of the 4 million doses that J&J had to give to the Federal government.

More Good News on Vaccines!! And How the Johnson and Johnson Vaccine Works As well as the Moderna/Pfizer

It is certainly exciting to hear that we may have enough vaccine on tap by the end of May to vaccinate the entire country. The fact that Merck is stepping in to produce additional single-shot J&J vaccine certainly went a long way to cut off about 2 months from that expected date. It may take quite some time beyond May to get the vaccine in people's arms though.

It turns out that while the **J&J vaccine** is about **70**% **effective** in **preventing disease 2 weeks after injection percentage improves to over 90% by 60 days.** There is a somewhat humorous-appearing graph that depicts this rise in efficacy in this **Boston Globe article**.

Below I have included links to detailed and exquisitely illustrated explanations of how the currently

approved vaccines work.

How the Johnson and Johnson vaccine works

How the Moderna and Pfizer vaccines work

NEW! 3/3/2021 New England Journal of Medicine Deep Dive into J&J Vaccine - audiofile

All three approved vaccines work by getting some of our cells to manufacture parts of the spike protein that is on the outside of the COVID-19 virus. This allows our immune system to be able to recognize the spike protein immediately upon being exposed to the virus and to rapidly attack it. All three vaccines do this through messenger RNA. The J & J vaccine does this by introducing a piece of COVID-19 spike protein DNA into the cell and then that DNA produces spike-protein messenger RNA and eventually spike proteins. The Moderna and Pfizer vaccines have the spike protein messenger RNA in them and enter cells directly.

It is our obligation to answer all your questions about the vaccines whether you are enthusiastic or hesitant to be immunized. One **misconception** that is making the rounds is **that the new J&J vaccine changes your DNA**. I actually found it challenging to find medical literature that addresses that subject. Fortunately, I have a friend and colleague that worked with Dr. Barouch who helped design the J&J vaccine. The human adenovirus used in the vaccine, which has been rendered incompetent to cause infection, has coronavirus DNA attached to it, but it DOES NOT incorporate into our own DNA. This adenovirus has been used in vaccines for over 20 years, without complications, in the mostly unsuccessful crusade to find an AIDS vaccine.

Ultimately, our chances to achieve herd immunity (a high enough percentage of the population being immune so that the virus cannot get from sick person A to person B because all the person B's are immune. The non-immune person C is surrounded by so many immune B's that they have minimal chance to meet up with person A before A is no longer contagious) will depend more on what percentage of people get vaccinated than on how effective one shot is over another.

Prior vaccines that have had serious (although rare)

complications associated with them, such as the oral polio and yellow fever vaccine, have all shown up within 6 weeks of getting vaccinated. But this disease, COVID-19, is associated with up to 25% of people having symptoms for at least 4 weeks and 10% beyond 3 months. We are not just talking about old and debilitated people who become so-called 'long-haulers', but also, many young people who had apparently minor symptoms during the illness. So fear the devil you know (COVID-19) and don't overplay about the devil you don't know (the approved vaccines).

Get the vaccine when it is available !!

Can We Begin to Let Our Guard Down?

Stay positive - there is a light at the end of the tunnel regardless of whether you get your vaccine now or weeks from now.

Epidemiologically the improvement in our success in controlling this pandemic is still 50% more dependent on wearing masks and socially distancing in public than it is on vaccines. As hard as it is to believe, preventive measures, other than the vaccine, are absolutely critical. I agree with Dr. Fauci and strongly disagree with Governor Baker regarding loosening up of restrictions on restaurants and other public venues. This is not the time to let our guard down.

The <u>CDC</u> has just released new guidelines today, March 8th, on what modifications of behavior are possible two weeks after vaccination. It is still going to be critical that everyone wear masks in public, as there will be no visible way to identify who has been vaccinated. Anxiety for those who are unvaccinated will invariably result. Also, we still are unsure about how much the vaccines protect against us from being asymptomatic carriers. It will probably prove to markedly lower the carrier state, but how much that is for each type of vaccine is unknown.

Finding a Covid-19 Vaccine for Yourself

Unfortunately, as the State website does not have a true waiting list, it currently takes a lot of perseverance to land an appointment. **The best websites to find available**

vaccines are MACovidVaccines.com and VaxFinder.Mass.Gov. You must click on the box that says "show only sites with known availability" when you use the VaxFinder website or you will have a list of useless vaccination sites. Try connecting with CVS and Walgreens directly. It appears that CVS downloads its appointments early in the morning. So check in daily with them between 4AM-6AM.

If you get an email from Beth Israel-Lahey or MGH-Brigham stating that you are eligible for a vaccine appointment, please accept the invitation. They are again contacting potentially eligible patients, and I know of some patients who have had multiple offers. And one patient even thought it might be a scam - it is not.

Again, we will keep you abreast of any changes to vaccine availability in our office.

Clinical Updates

Newly Recognized Short-term Side Effect of Moderna Vaccine? About 7 days after the first dose or 2 days after the 2nd dose of the vaccine, a local swelling and soreness can occur at the site of the vaccination. It will subside on its own. You can take an antihistamine if it is very annoying /itchy. It is not a contraindication to a second vaccine, BUT you may want to ask to have the second dose administered on the opposite arm.

Should You Get the Vaccine if You have Had COVID Infection? It appears the consensus has changed on this. Perhaps it is best to wait close to 3 months after you are over the infection. The reactions have been strong to the shot in some cases with mylagias and flu-like symptoms. In fact, one dose of vaccine may be all that will be recommended for those who already had COVID-19, because the immunity obtained is so strong after that one dose.

Should you avoid Tylenol and Ibuprofen prior to or immediately after the COVID vaccine? The CDC and other authorities are suggesting to avoid taking these medications in anticipation of having pain. They MAY partially blunt the body's immune response to the vaccine. This effect

has been seen with other vaccines. If you truly need these medications prior to or after, then by all means take them.

Double-masking? Wearing a cloth mask over a medical mask — or tying knots in a medical mask's ear loops close to the mask and tucking in the excess side material — both seem to improve mask fit and could reduce spread of SARS-CoV-2, according to an MMWR study. Researchers found that a regular, unknotted medical procedure mask blocked 42% of particles from a simulated cough from a head-form. A cloth mask alone blocked 44%. But a cloth mask over a medical procedure mask blocked 93% of particles. A separate experiment assessed 10 mask combinations. The receiver's exposure was most reduced (above 95%) when both source and receiver head-forms were outfitted with either double masks or knotted-and-tucked masks. The authors note that they only used one type of medical mask and one type of cloth mask, so effectiveness may vary with other products.

The Skinny on COVID-19

Common Symptoms

Fever, chills, cough, sore throat, shortness of breath, headache, fatigue, diarrhea. As such a high percentage of people have no symptoms, if you have any one of these symptoms there is reason to quarantine yourself, notify us at Davis Square Family Practice, and get tested. We will be particularly concerned to evaluate you for any symptoms resembling shortness of breath.

Incubation Period

You can come down with symptoms anywhere from 2-14 days from contact with an infected person, but usually by 5-7 days.

Contagious Period

The contagious period is usually 2 days prior to symptoms showing up and for up to 7 days after. No study of non-hospitalized people has shown the virus can be cultured out after 8 days from the start of symptoms. If you are asymptomatic then you could, in theory, be infectious for up to 14 days. The CDC is now okaying asymptomatic people who

have been exposed to be tested between 5-7 days. If they test negative, then they can come out of quarantine at 10 days.

What To Do To Prevent Getting COVID-19

Wear a mask and socially distance. Good hand hygiene is still considered important, but most transmission of COVID -19 is through the air. This **December 10th article in JAMA on how to make your mask more effective** is of value. If you twist the ear loops and tuck in the side pleats of a surgical mask, then you increase its efficacy by 50%. There were some nylon and cloth masks that were as good or better than the surgical mask with loops. Please read the article for more details.

If You Get COVID-19, What To Do To Lower Risk of Complications

There are no new outpatient treatments that have any proven efficacy except monoclonal antibodies may lower the risk of hospitalization by over 50%. Monoclonal antibodies may be what made the difference for the Former President Trump. Unfortunately, the two types of Monoclonal antibodies are not widely available.

Another recent study in hospitalized patients showed that those that were already on **statins**, **ACE-inhibitors**, **and calcium channel blockers were associated with a much lower risk of death**.

Vitamin D levels have been shown to be lower in people who have died from COVID-19. It may just be that people who are in poor health have lower Vitamin D levels, because they are more likely to be housebound and have less opportunity to make their own Vitamin D from sunlight. Still there have been suggestions that Vitamin D is helpful to lower risk for contracting COVID-19 and for having complications. It is safe for adults to take 1000 to 2000 international units (IU) of Vitamin D, and 600 IU of Vitamin D is already recommended for all children over 1 year of age (400 IU from Birth to 1 year.)

Sincerely,

Deborah Bershel, MD Michelle Clarke, FNP Andrea Dandridge, FNP Carmen Phillips, FNP Perry Blank, FNP and all our wonderful support staff: Anne Roche - Practice Manager Nicole Preusch, MA Daketa Bowens, MA
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