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PUCILLO FAMILY PRACTICE P.A.
 WELLNESS CENTER

Family Medicine & Bariatrics

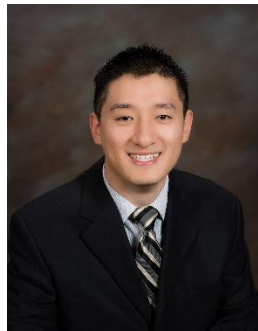
PFP CMPS March Newsletter: Vaccine updates



Happy Spring.
We hope you all made it through the
Texas winter well.



Dr. Ron Pucillo, M.D.



Dr. Brian Tong, M.D.

It's been a year since the COVID-19 pandemic started. In the past year, there have been a total of 117 million cases, 2.59 million lives lost and many lives affected worldwide. The vaccinations efforts are moving at a rapid pace and we are excited for the months ahead.

Outline of this month's newsletter:

- Updates on vaccines
- Johnson & Johnson vaccine
- Herd immunity

Vaccine Updates:

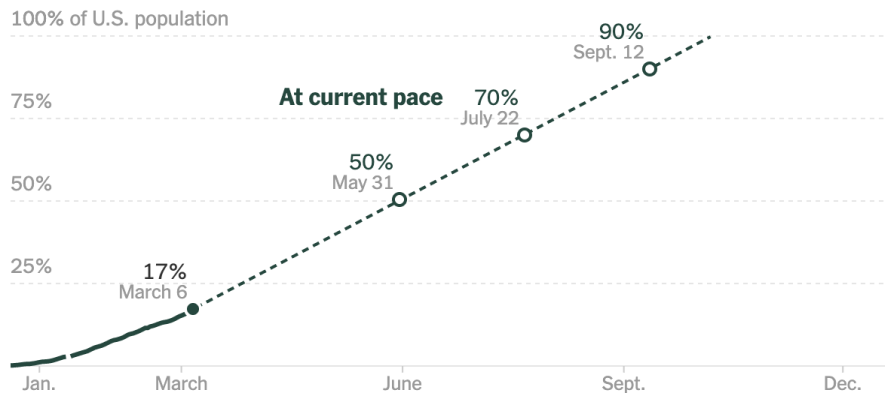
1. Who may receive vaccine (updated on March 7th 2021)

- **Phase 1a**
 - **Healthcare personnel**
 - **Residents of long-term care facilities**
- **Phase 1b**
 - **65+ years old**
 - **16+ years old with chronic health conditions**
 - **School related personnel - teachers, staff, bus drivers, child care provider**

2. Vaccination registration

- <https://publichealth.harriscountytexas.gov/Resources/2019-Novel-Coronavirus/COVID-19-Vaccine-Information/Local-COVID-19-Vaccine-Providers>
- <https://vacstrac.hctx.net/landing>
- <https://vaccinewaitlist.fortbendcountytexas.gov/>

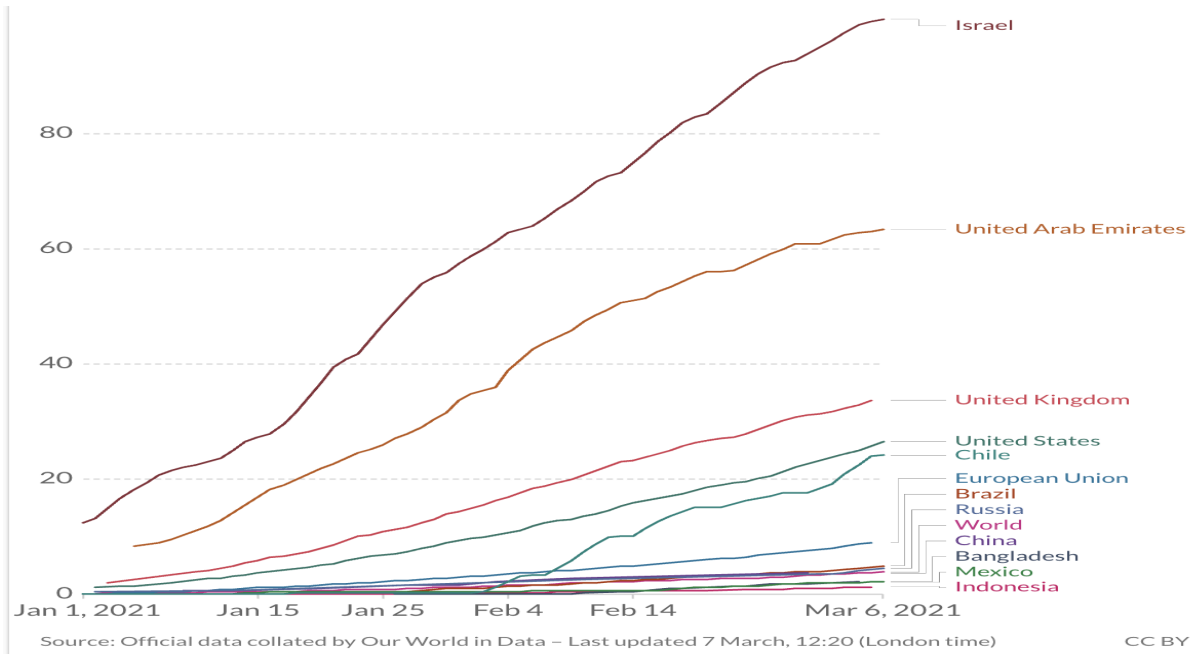
3. Vaccination projection in the U.S.A.



Source: Centers for Disease Control and Prevention | Note: Data from Dec. 20 to Jan. 12 are for all doses administered. Data for Jan. 13 is unavailable. Projections could change if additional vaccines are authorized.

**Current expected vaccination projection
70-90% to reach herd immunity**

4. U.S compared to the world



5. Worldwide vaccines

Developer	Country	Clinical phase	Efficacy	Doses	Approved in at least one country	Approved in United States
CanSino	China	3	66%	1	Yes	
Sinopharm (Beijing)	China	3	79%	2	Yes	
Sinopharm (Wuhan)	China	3			Yes	
Sinovac	China	3	50%	2	Yes	
Bharat	India	3		2	Yes	
Gamaleya	Russia	3	92%	2	Yes	
Vector Institute	Russia	3		2	Yes	
Oxford-AstraZeneca	United Kingdom, Sweden	2 and 3	62%–90%	2	Yes	
Pfizer-BioNTech	United States, Germany	2 and 3	95%	2	Yes	Yes
Johnson & Johnson	United States	3	61%–72%	1	Yes	Yes
Moderna	United States	3	95%	2	Yes	Yes
Novavax	United States	3	89%	2		

Note: Efficacy can depend on dosage, severity of infection, and COVID-19 variant.

Johnson & Johnson Vaccine

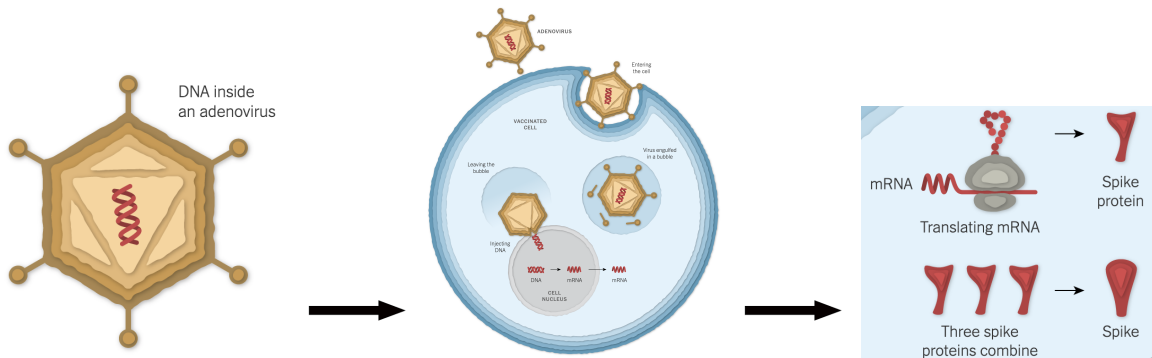
1. Vaccine background

- Recently received FDA approval for emergency use on 02/27/2021
- **1 shot vaccine** authorized to be used for individuals for 18+
- Immunity response within 15 days with significant immunity in 29 days
 - **90% effective at preventing illness**
 - **72% effective at preventing severe symptoms**
 - **100% effectiveness at preventing hospitalization and death**

2. How does it work? Vaccine = COVID 19 spike protein DNA in Adenovirus capsule.

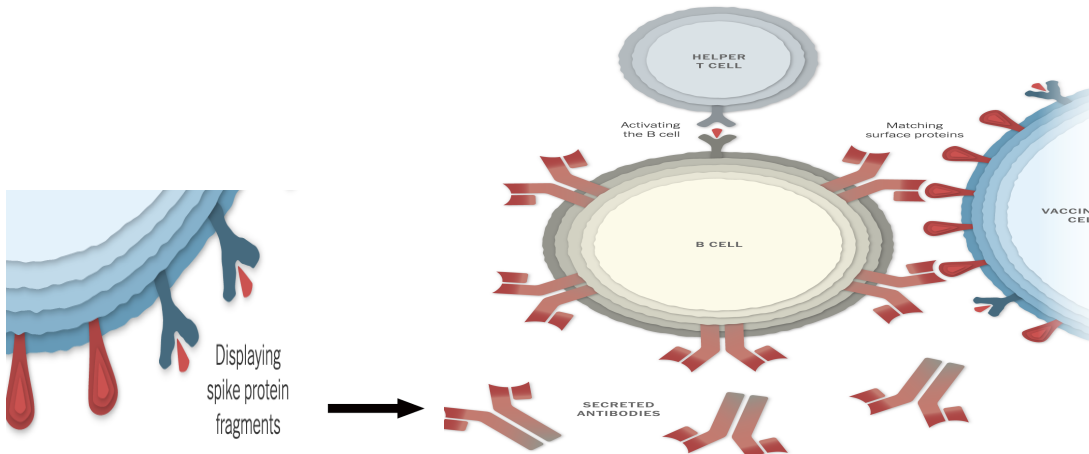
Vaccine is injected into the body carrying COVID DNA.

Using the cell's replication system, DNA is used to make spike proteins.



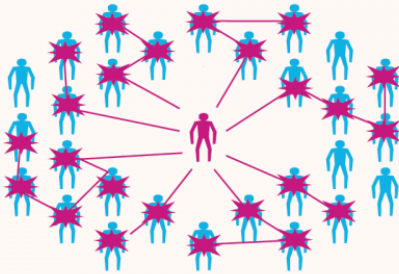
Spike proteins is presented on the cell's surface.

It is recognized by T cell which then help B cell to make the proper antibody, providing immunity.

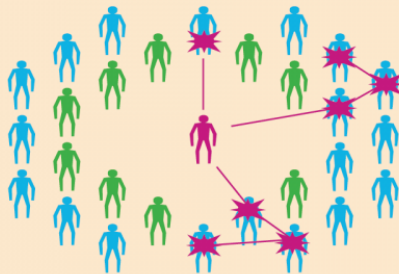


Herd Immunity

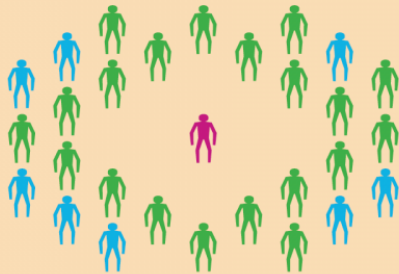
HOW HERD IMMUNITY WORKS



When no one has immunity, contagion has many opportunities to spread quickly.



The more immunity we have in the system, the less often contagion comes into contact with the susceptible.



Spread of contagious disease is contained.

As more individuals will get vaccinated, herd immunity will occur and spread of COVID virus will be contained.

We continue to wish you all the best as travel and restaurants begin to reopen. Please feel free to contact us if you have any questions.

Sincerely,
Staff at Pucillo Family Practice