COVID-19 Update
Variants and Vaccines

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What is a variant?

- Viruses constantly change through mutations that create new strains of virus

- A variant is a version of the virus that possesses mutations that differ from its parent virus

- Some virus variants emerge and then disappear, while others persist or become common

- Through active genomic surveillance, scientists can identify variants that are concerning, requiring further study and precautions

- Public Health becomes concerned about a SARS-CoV-2 variant when it affects COVID-19 transmission, severity, testing, treatment, or vaccine effectiveness

Variant classification for SARS-CoV-2

- There are three classifications of variants:
  - The term **variant of interest** (VOI) is used to describe a newly emerging variant for which the medical and public health importance is not yet known
  - If a variant is thought to be more contagious or likely to cause greater illness or severe disease, or may impact treatment or vaccine response, then it is considered a **variant of concern** (VOC)
  - A **variant of high consequence** (VOHC) has clear evidence that prevention measures or medical countermeasures (MCMs) have significantly reduced effectiveness relative to previously circulating variants. ***There are currently no variants that rise to the level of high consequence***

Variants of Concern

- There are current 5 Variant of Concern (VOC) in the United States:
  - **B.1.1.7**: initially detected in the UK, first identified in the US in December 2020
  - **B.1.351**: initially detected in South Africa in December 2020, first identified in the US at the end of January 2021
  - **P.1:** initially identified in travelers from Brazil, who were tested during routine screening at an airport in Japan, in early January. First detected in the US in January 2021
  - **B.1.427 and B.1.429**: These two variants were first identified in California in February 2021 and were classified as VOCs in March 2021.

Cases of Variants of Concern in the United States*†

Number of Cases

- ○ 0 to 0
- ○ 1 to 150
- ○ 151 to 300
- ○ 301 to 450
- ○ 451 to 600
- ○ 601 to 750
- ● 751+
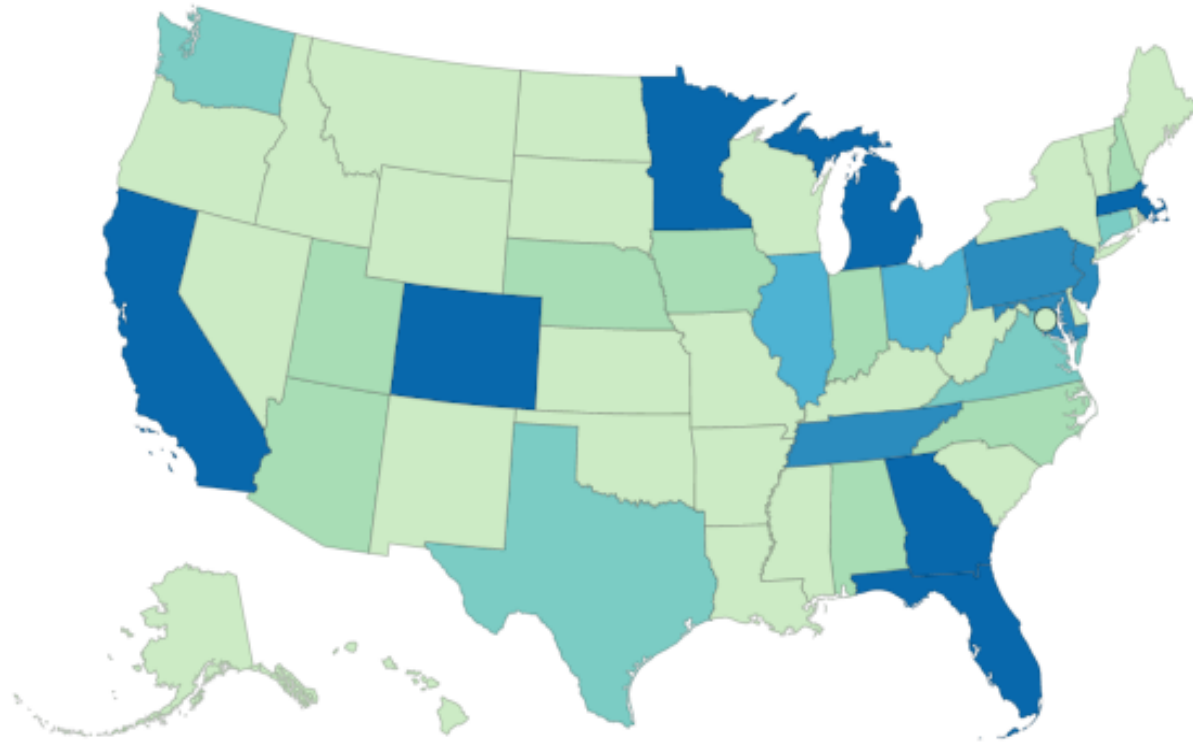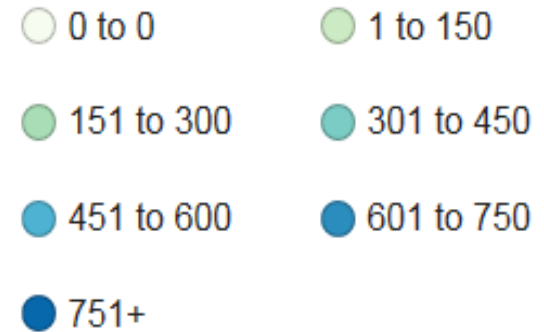
Filters

Variant B.1.1.7 ⌄

Territories AS GU MH FM MP PW PR VI

Variants of Interest (VOI)

- There are three VOIs being tracked in the United States:
  - B.1.526 – first detected in New York in November of 2020
  - B.1.525- first detected in New York in December of 2020
  - P.2-first detected in Brazil in April 2020
- You may have heard about a variant in the headlines be called the "double mutant." This particular variant is thought to have originated in India where it makes up 15-20% of cases in one region. There is not much more info available on this variant yet and CDC has not yet added this variant to the list

What can we do?

- The most effective way to reduce the emergence and spread of variants is to reduce transmission.

- A virus can't mutate if it is not replicating, and it can't replicate without a host.

- Vaccination is key – the faster we can get people vaccinated, the more likely we will be able to slow spread of the virus.

- Continue masking (with more consistent use and better masks), distancing, and avoidance of large public gatherings/crowds

Vaccines

There are currently three approved vaccines in the U.S.

Vaccination Strategy

SF has the capacity to facilitate 20,000 vaccines per day
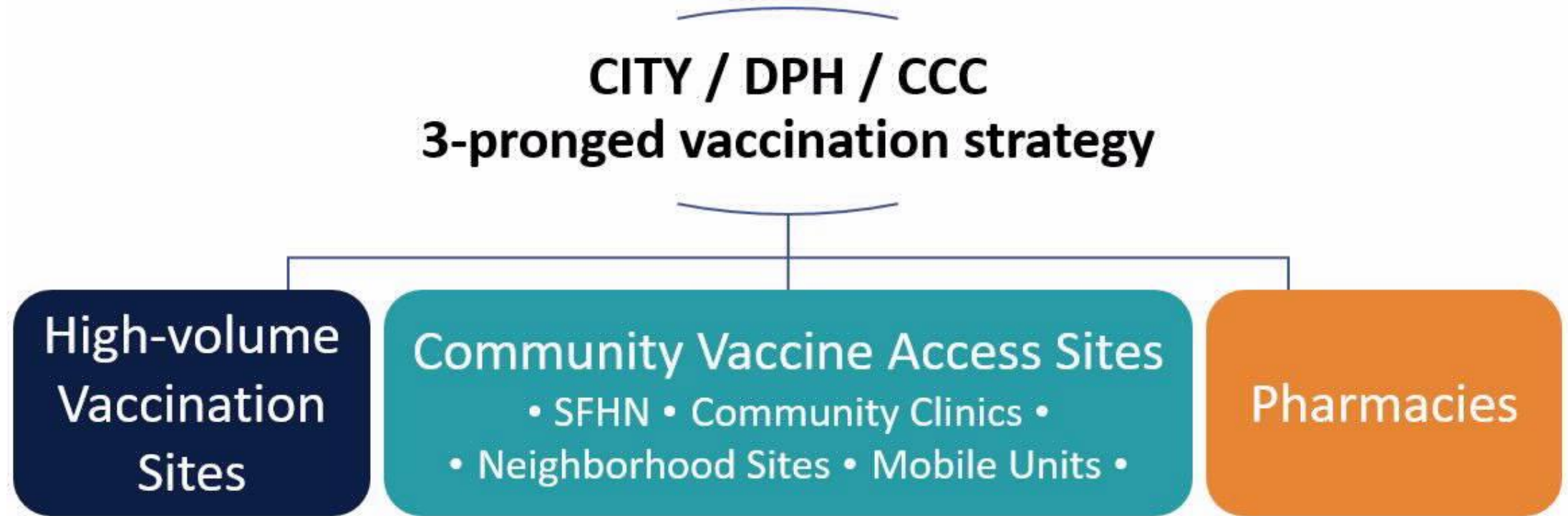
Accessing vaccines in San Francisco

- Every Californian age 16 and above is currently eligible for a vaccine

- Book appointments through:
  - SF.gov/getvaccinated
  - myturn.ca.gov/

- SF Call Center: (628) 652-2700

- Supplies are still limited

Vaccination progress in San Francisco
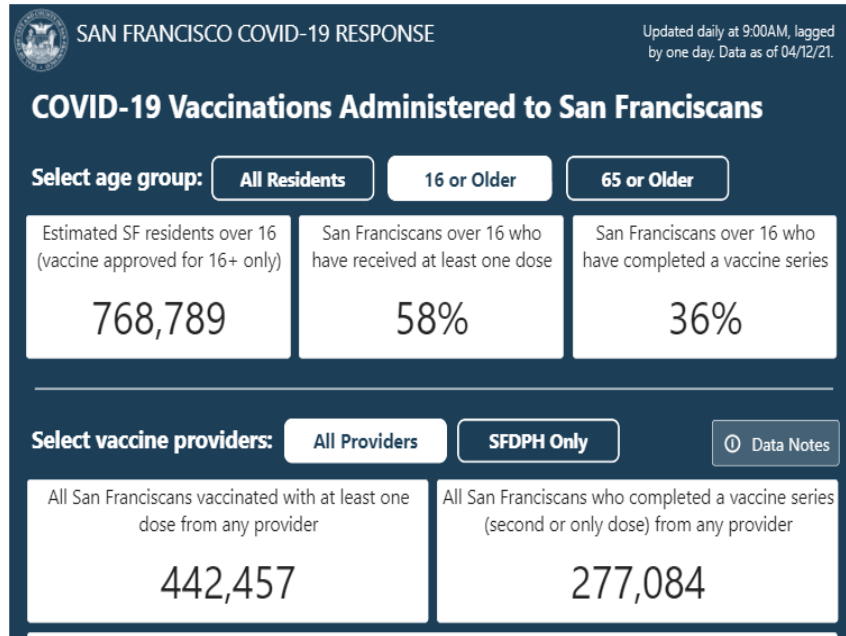
San Franciscans 16+
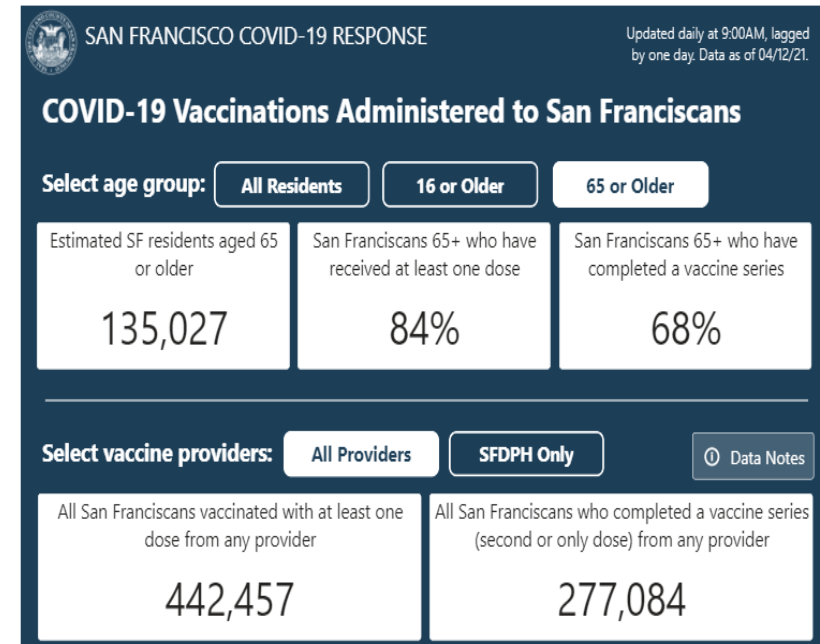
San Franciscans 65+

(as of 4/13/2021)

Resources

Variants

- https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant.html

Vaccines

- SF.gov/getvaccinated

- myturn.ca.gov/

- SF Call Center: (628) 652-2700