Health Forum of West Michigan

February 5th 2021

COVID-19 Vaccinations
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Why is this important?

Select a jurisdiction:

United States

- + indicates observed count above threshold
- g Predicted number of deaths from all causes, including COVID-19
- g Predicted number of deaths from all causes, excluding COVID-19
- threshold for excess deaths.

446,000 Excess Deaths since Feb 2020

Weekly number of deaths

Comparing excess deaths including/excluding COVID-19



https://data.cdc.gov/NCHS/Excess-Deaths-Associated-with-COVID-19/xkkf-xrst/

Vaccination Types

• mRNA

Viral Vectors

Protein-based

Inactivated virus

mRNA Vaccines

Pfizer

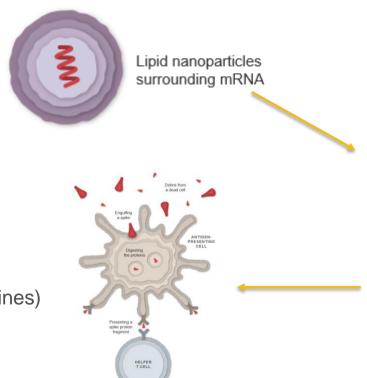
- BNT162b2
- 95% (2 vaccines)
- Freezer at -94 degress F

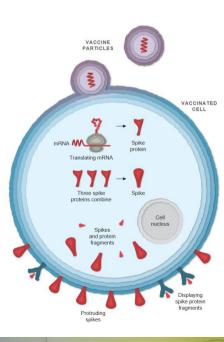
Moderna

- mRNA-1273
- 94.5% (2 vaccines)
- -4 degrees F

CureVac

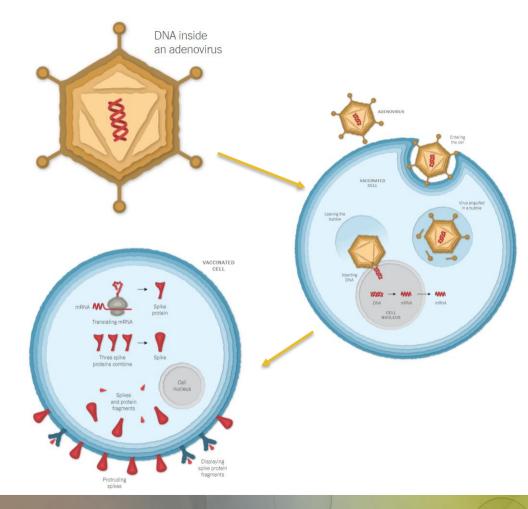
- CVnCoV
- Phase 3 ongoing (2 vaccines)
- 36-46 degress F





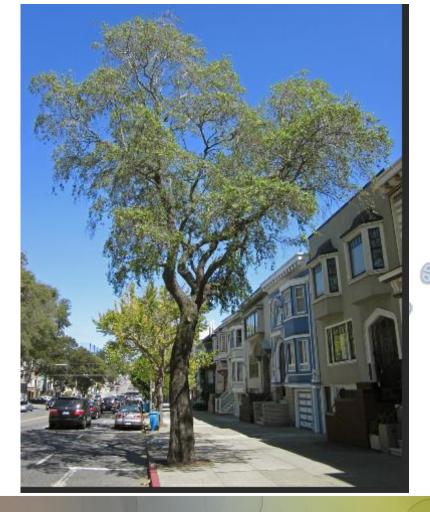
Vector Vaccines

- Sputnik V
 - Gam-Covid-Vac
 - 91.4% (2 vaccines)
 - Freezer storage
 - Different vector for booster
- AztraZeneca
 - AZD1222 (Covidshield)
 - 62-90% efficacy (2 vaccines, different dose)
 - Refrigerator for 6 months
- Johnson&Johnson
 - Ad26.COV2.S
 - 72% efficacy against mod-severe disease in US
 - Single vaccine (although new booster trial coming)
 - 3 months refrigerated



Protein-based vaccines

- Novavax
 - NVX-CoV2373
 - 89.3% (2 vaccines)
 - Soapbark Tree
 - Refrigerator stable
- Bektop (Russia)
 - EpiVacCorona
 - Unknown efficacy in Phase 3





Inactivated Virus

- BBIBP-CorV
 - 79.34% (2 doses)
 - Chinese Sinopharm

- Sinovac
 - Corona Vac
 - 50.38% (2 doses)
 - Private Chinese Biotech Firm

SARS-CoV-2 Variants

- B.1.1.7
 - UK variant
 - Spreads 50% more easily
 - Possible increase in mortality
 - Current vaccines protective
- B.1.351
 - South African Variant
 - More infectious
 - Less protection from vaccines
 - No evidence of more severe disease yet
- P.1
 - Brazilian variant (documented in Japan)
 - Possibly less protection from vaccine and previous COVID

SARS-CoV-2 **Variants**

US COVID-19 Cases Caused by Variants

Updated Jan. 31, 2021

Languages ▼

Variant	Reported Cases in US	Number of States Reporting
B.1.1.7	467	32
B.1.351	3	2
P.1	1	1

Emerging Variant Cases in the United States*+



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

Territories AS GU MH FM MP PW PR VI

L CDC

Mercy Health Saint Mary's Efforts

- Successes
 - Vaccinated the majority of our employees
 - Partnered with Spectrum, Metro, and KCHD to vaccinate our teachers and law enforcement
 - Opened 2 sites to serve the community

Mercy Health Saint Mary's Efforts

- Challenges
 - Predicting allocation
 - Matching delivery with demand
 - Scheduling
 - Ensuring equitability and justice in vaccination

Mercy Health Saint Mary's Efforts

Drive through parking garage

 Kentwood high volume site



BeRemarkable.

Mercy Health + Saint Joseph Mercy Health System, Members of Trinity Health