Disclaimer

Reliable Information about any medical condition or treatment requires multiple carefully designed large studies done over many years.

- Small initial studies are often proven wrong by later larger studies
- Early results of a study often change:
  - After the study is completed
  - After other researchers re-analyze the data
- The actual data published does not always support the narrative asserting what the data means
- It’s years too early into this illness to view any current information as reliable and I did not review the research methodologies in detail.
## COVID Vaccines Under Approved and Under Development

<table>
<thead>
<tr>
<th>Phase</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
<th>Limited</th>
<th>Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>testing safety and dosage</td>
<td>expanded safety trials</td>
<td>large-scale efficacy tests</td>
<td>Vaccines in early or limited use</td>
<td>approved for full use</td>
</tr>
<tr>
<td>Participants</td>
<td>Small number</td>
<td>Hundreds</td>
<td>Thousands</td>
<td>AstraZeneca in UK Russia 2 more China 3 more</td>
<td>Pfizer in Canada Moderna in Canada Sinopharm in China</td>
</tr>
<tr>
<td>Vaccines</td>
<td>35</td>
<td>26</td>
<td>20</td>
<td>6</td>
<td>4</td>
</tr>
</tbody>
</table>

- 67 Vaccines in human trials total
Pfizer/BioNTech and Moderna Vaccines

Pfizer vs. Moderna

- 2 Doses
- mRNA
- Effective across gender & race
- Up to 95% Effective

**Pfizer**
- 30 microgram doses administered 21 days apart
- 95% effective after the 2nd dose
- 88.9% effective after the 1st dose
- 36,621 clinical trial participants (16+ years old)
- Stored at -94°F
- Age 16 & Up

**Moderna**
- 100 microgram doses administered 28 days apart
- 94.5% effective after the 2nd dose
- 80.2% effective after the 1st dose
- 30,350 clinical trial participants (18+ years old)
- Stored at -4°F
- Age 18 & Up

Mental Health First Aid
National Council
TheNationalCouncil.org
Johnson and Johnson

- genetically modified common cold virus common in chimpanzees produces COVID-19’s spike proteins
- Initial efficacy results
  - USA 72%
  - Latin America 66%
  - South Africa 57%
  - 85% effective in preventing severe cases of Covid
- Stores for 3 months at 36-46 F and 2 years at -4 F
- Single dose
- Requested EUA from FDA on Feb 4, FDA review scheduled Feb 26
- But only 7M doses initially available, 30M by April
- Second Phase 3 trial to observe the effects of two doses of their vaccine, instead of just one began in November
- US funding: $1 B upfront for 100M doses if the vaccine is approved.
NovaVax

- Grows spike proteins in moth cells (same method used in flu and HPV vaccines) then places the spike proteins onto microscopic particles that trigger an immune response after injection.

- Initial efficacy results
  - Britain 90%
  - South Africa 60%

- Stores for 3 months at 36-46

- Two doses

- US Funding: $1.6 B upfront in July, contract for 100M doses if approved

- Current phase 3 trials underway
  - Dec 28 launched 30,000 volunteer trial in US
COVID Virus Structure

- Spike protein gene
- Spikes
- Envelope/Membrane
Three Ways to get spike protein to stimulate immunity:

- Attenuated virus
- Adenovirus
- DNA vaccines
- RNA vaccines
- Protein vaccines
Vaccine Approaches to Building Immunity to COVID

- **Inactive or Attenuated Virus** uses a weakened or inactivated DNA version of the actual virus with its causing the illness to trigger an immune response.

- **Adenovirus vaccines** use common cold viruses as a “Trojan horse” to carry the target virus DNA into the body to trigger an immune response. It can enter cells, but it can’t replicate inside them.

- **Protein vaccines** use small proteins from the target virus to trigger an immune response.

- **RNA vaccines** use some but not all of the RNA from the target virus to trigger an immune response.

- **DNA vaccines** use some but not all of the DNA from the target virus to trigger an immune response.
## Vaccine Types – Available or in Phase 3 Trials

<table>
<thead>
<tr>
<th>Vaccine Delivery Approach</th>
<th>Traditional Vaccines</th>
<th>COVID Vaccines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactivated and Live Attenuated Virus</td>
<td>influenza, chickenpox, measles, mumps, rubella, flu</td>
<td>(3 versions in China)</td>
</tr>
<tr>
<td>Adenovirus (common cold)</td>
<td>Rabies, Distemper, Smallpox, Ebola, flu, HIV*</td>
<td>AstraZeneca* Johnson &amp; Johnson*</td>
</tr>
<tr>
<td>Protein based</td>
<td>HPV, Shingles, Hepatitis B</td>
<td>Novavax*</td>
</tr>
<tr>
<td>RNA</td>
<td></td>
<td>Pfizer, Moderna</td>
</tr>
<tr>
<td>DNA</td>
<td>Zika* - None approved in US</td>
<td></td>
</tr>
</tbody>
</table>
Vaccination Progress Report – February 7

• Fully Vaccinated 9.1 M (1.7%)
• At least one dose 31.6 M (9.5%)
• Average Vaccinations per day 1.4 M
• Doses Delivered 59.3 M
• Doses used 69%
  – North Dakota 96%
  – Alabama 57%

Estimated date to 70% at least partially vaccinated (herd immunity) – Sept 16
COVID Variants Appearing

- Britain (.1.1.7) – More contagious, may be slightly more deadly
- South Africa (B.1.351) – not as susceptible to vaccine induced antibodies but vaccines are still effective
- Brazil (B.1.1.28.1 or P.1) – similar to South African variant
- Currently USA has no national surveillance program checking virus genomes for new mutations
Persons with SMI or SUD should be CDC Priority Phase 1c

• CDC Priority Phase 1c populations
  – Age 65-75
  – **Age 16-64 with medical condition putting them at high risk of Hospitalization, illness, death**
  – Essential Workers

• Increased risk due to SMI or SUD
  – Persons with SMI die 10-25 yrs younger mostly due to medical illness
  – Two national studies report increased rates of COVID in persons with MI
  – Study in NY found persons with schizophrenia had 2-3X COVID mortality
  – Study of 73M people found persons with SUD at 8.7X risk COVID infection
  – Study 54,529 people found persons with SUD had 2.3-1.8X risk of hospitalization, ventilator, and mortality
Vitka Eisen, MSW, Ed.D
Chief Executive Officer

Dr. Ana Valdés, MD
Chief Healthcare Officer
HealthRIGHT 360 and California Context

• **Who We Are**
  – Federally Qualified Health Center (FQHC)
  – Certified Community Behavioral Health Clinic (CCBHC)
  – Behavioral Health SUD Treatment Providers (inpatient and outpatient)
  – Reentry Service Providers

• **California’s Landscape**
  – 58 Counties
  – 60 Health Departments
Barriers to COVID-19 Vaccinations

- Media
- Social Media
- Peers
- Access
- Uneven Roll Out
- Legacy of medical experimentation on POC
Effort to Increase Vaccine Uptake

- Virtual CHO Town Halls
- Messaging from CEO
- Vaccine FAQs
- Videos of POC leadership getting vaccinated
- Program level education
- Program level COVID committees
- PSA’s
- Peer discussions
- Partnering with the Union to discuss ideas for engaging staff and clients

Radawn Alcorn, MSW, LCSW
VP of BH NorCal
HealthRIGHT 360 Vaccination Results

Dashboard

Declined, Outstanding and Vaccinated

- Declined: 120 (10%)
- Outstanding: 519 (45%)
- Vaccinated: 511 (44%)

Racial and Ethnic Disparities

Count and percent of Status by Race/Ethnicity

- Hispanic/Latino: 3% Declined, 12% Outstanding, 16% Vaccinated
- White: 16% Declined, 12% Outstanding, 16% Vaccinated
- Black/African American: 8% Declined, 6% Outstanding, 5% Vaccinated
- Asian: 3% Declined, 7% Outstanding, 6% Vaccinated
- Two or more races: 3% Declined, 6% Outstanding, 5% Vaccinated
- Native Hawaiian: 5% Declined, 5% Outstanding, 5% Vaccinated
- American Indian: 1% Declined, 5% Outstanding, 5% Vaccinated
- (Blank): 1% Declined, 5% Outstanding, 5% Vaccinated

Mental Health First Aid
National Council
TheNationalCouncil.org
Pivoting as an Organization

- Keeping our staff updated with information
- Survey
- Trust building
- Incentives
Questions?

Thank You
for being an important part of
the National Council community.