# CoViD-19 Status Report ... 26 June 2022

Can we control the continual spread of CoViD-19

Thomas Britt, MD, MPH, ACSM-CEP

Health Policy Institute ... HPIChicago.org

## **BREAKING NEWS**

- FDA Authorizes CoViD-19 Vaccines for Children
  - Pfizer-BioNTech ... 6 months to 4 years
  - Moderna ..... 6 months to 5 years
  - Moderna ..... 6 to 17 years

CDC has Approved ... these new vaccinations should be available

- The Following Data being presented is from an organization call "AmeriCares"
  - o 542 Million infections have occurred in 192 countries
  - 6.3 Million deaths have occurred worldwide
  - 86.7 Million infections have occurred in the US
  - $\circ$   $\,$  More than 1 Million deaths have occurred in the US  $\,$
  - NOTE: the US is 4-5% of the global population, however we have about 16% of global deaths ... Why, Why??
  - $\circ$   $\,$  Vaccines could have prevented more than 300,000 CoViD deaths
  - Omicron variants especially BA.2 are highly transmissible ... but less severe

### Vaccine Effectiveness in the U.S.

- Unvaccinated people are 17 times more likely to be hospitalized
- The unvaccinated are 15 times more likely to die from CoViD-19
- 99% of people that died from CoViD-19 during the past month were NOT vaccinated

Positivity Rates of CoViD-19 ... (Source: Johns Hopkins Coronavirus Resource Center)

- Positivity Rate is a 7-day average per 100,000 people
- The desired Positivity Rate is less than 5%
- The higher the Positivity Rate, the higher the Incidence and subsequent Morbidity and Mortality of this disease

### Herd Immunity classically occurs when > 70 - 90% of the population are "Fully Vaccinated"

- 1 dose is better than no dose ... but 1 dose is not fully vaccinated
- The second Booster is being suggested for those who are eligible

## Principle Reasons for Poor Booster Administration & Racial Disproportionality

- Misinformation
- Original vaccination doses, initially were in limited supply
- Vaccine Hesitancy
  - $\circ~$  In May 2021 56% of Black adults vs 65% of White adults had received at least one dose of the available vaccine
- Clinical staff shortages resulting from the increase in contagiousness of the Omicron variant, which led to less vaccination ... worse in Blacks

• 30% of Blacks were unsure or unaware that they need a booster shot (this apparently is a function of misinformation and disinformation

Booster Eligibility ... (Is based on which vaccine series previously received; ... Source CDC)

NOTE: Booster shots "Boost" your immune system, providing you with more protection against severe disease, hospitalization and death. The mRNA booster technology is preferred as it can be easily changed to match the variants.

- Received Pfizer-BioNTech
  - Everyone older than 12 years ... teens, 12-17 may only get Pfizer booster
  - When to get Booster ... 5 months after completing vaccination series
  - You can get either the Pfizer or Moderna mRNA vaccine
- Received Moderna
  - Adults 18 years and older
  - When to get Booster ... 5 months after completing vaccine series
  - You get Moderna or Pfizer-BioNTech mRNA vaccine
- Received Johnson & Johnson
  - Adults 18 and older
  - 2 months after receipt of J & J vaccination
  - You can get Pfizer or Moderna vaccine

# **CoViD-19 Vaccination and Pregnancy**

• Professional organizations have reported *No Evidence* that CoViD-19 vaccinations, adversely impacts fertility in men and women of reproductive age nor pregnancy in women. In fact, they recommend vaccination if you are considering future pregnancy. *(Source: CDC)* 

## Chronic Diseases and its adverse impact on CoViD-19

- Chronic common and pre-existing diseases increases morbidity and mortality of CoViD-19
  - **CoViD-19 and Diabetes** (Source: American Diabetes Association, CDC)
    - People with diabetes have serious complications with CoViD-19.
    - Complication are worse if you have both diabetes and heart disease
    - Note: if you have uncontrolled diabetes, you are at greater risk for developing heart disease
    - People with *type1 or gestational diabetes* may also be at increased risk for developing severe illness from CoViD-19
  - **Obesity** ... should also be included here, as research has shown that obesity worsens the outcome of CoViD-19.
  - Vitamin D Deficiency ... Vitamin D is considered a hormone, that has anti-inflammatory properties. There is an adverse association between *Vitamin D deficiency* and severity of CoViD-19

## Do not be Cavalier about this Pandemic ..... Please, please do the following:

Get Tested (isolate or quarantine as is necessary) Wear Mask in crowded places Hand washing should be continued Get Vaccinated + Booster if eligible Continue with physical distancing Clean surfaces frequently used

Vigorously seek medical and healthy approaches to control your chronic diseases.