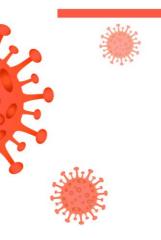




My Background

- Long time resident of Little Falls, New Jersey
- 25 years experience working for the Center For Disease Control
- Served as Assistant Commissioner of Health for New York City
- Followed by Consultancies, including two years with the Harvard Institute for International Development
- Currently run a cancer non-profit, The Life Raft Group

The goal is to share information that may keep others alive and well



COVID-19 CORONAVIRUS



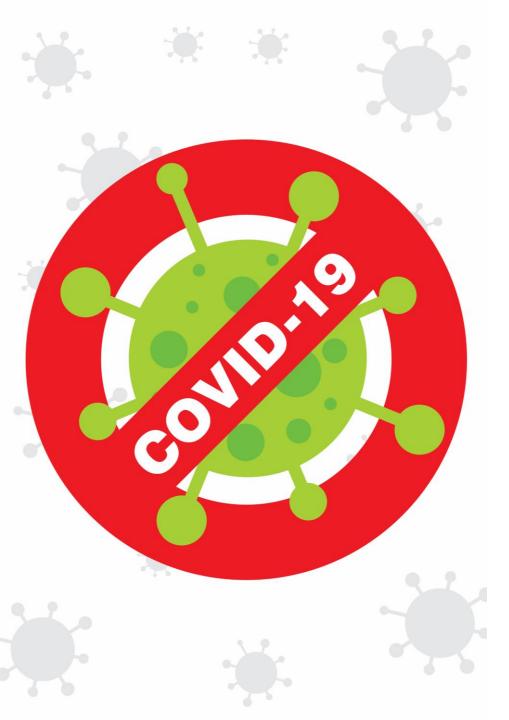
It is likely to become even worse.

- Pandemic Fatigue
- News from the UK: The virus has mutated



New Jersey Update

- Hit grim new pandemic milestone last week.
 - As of Sunday afternoon, the state had logged 17,751 confirmed and probable deaths from COVID-19.
 - Population just shy of 9 million, that amounts to about 1 death out of every 500 New Jersey residents.
- New Jersey public health infrastructure is struggling to keep up.



How We Can End the COVID Pandemic

WORK TOGETHER

- Continue to wear masks, social distance, wash our hands, and minimize travel and indoor gatherings
- Decrease Rate of Transmission: <1:1
- Most scientists estimate it will require about 70% of the population to develop herd immunity to stop this pandemic.



Herd Immunity: COVID-19 Infection

Develop the COVD19 infection.

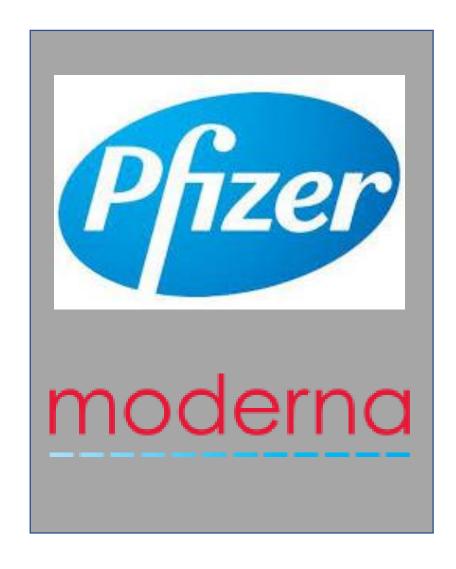
- Some patients will become very ill, both short- and long-term, and some will die.
- Unknown duration of immunity.
- Inability to precisely measure immunity leading to possibility of re-infection.



Herd Immunity: Vaccination

Vaccinations

- The new mRNA vaccines have an efficacy of over 90% in their FDA approved clinical trials.
- Immunity through vaccination may require repeat vaccinations, similar to the flu vaccine.



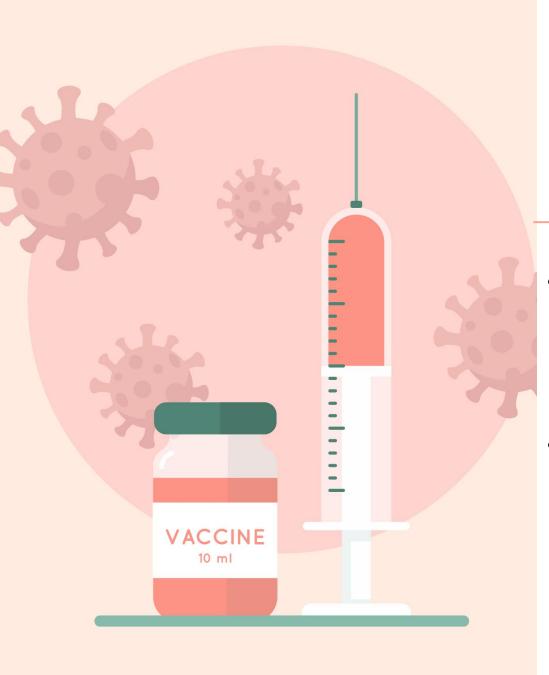
The FDA has granted emergency approval to Pfizer and Moderna Vaccines

- Both vaccines are based upon a principle called mRNA
- Both vaccines require two doses
- Pfizer vaccine requires storage under extreme temperatures
- Moderna vaccine does not



COVID-19 mRNA Vaccines

- mRNA vaccines are a new type of vaccine to protect against infectious diseases.
- mRNA vaccines teach our cells how to make a protein, called a spike protein. that triggers an immune response inside our bodies.
- To trigger an immune response most vaccines put a weakened or inactivated germ into our bodies. mRNA vaccines instead teach our cells to make a protein or just a piece of a protein that triggers an immune response.
- The immune response, which produces antibodies, is what protects us from getting infected if the real virus enters our bodies.



COVID-19 mRNA Vaccines

- These vaccines cannot give someone COVID-19.
 - mRNA vaccines do not use the live virus that causes COVID-19.
- The vaccines **do not** affect or interact with our DNA
 - mRNA never enters the nucleus of the cell, which is where our DNA (genetic material) is kept.
 - The cell breaks down and gets rid of the mRNA soon after it is finished using the instructions



Many months until enough people are vaccinated

- Wear a mask
- Wash hands
- Social Distance
- Avoid Travel & Indoor Gatherings

