



Coronavirus in LTC: Help is on the way...



Objectives:

- Current State of pandemic
- New developments in testing, treatment
- New vaccine developments



It's always darkest
before the dawn

Winter Surge is upon us...

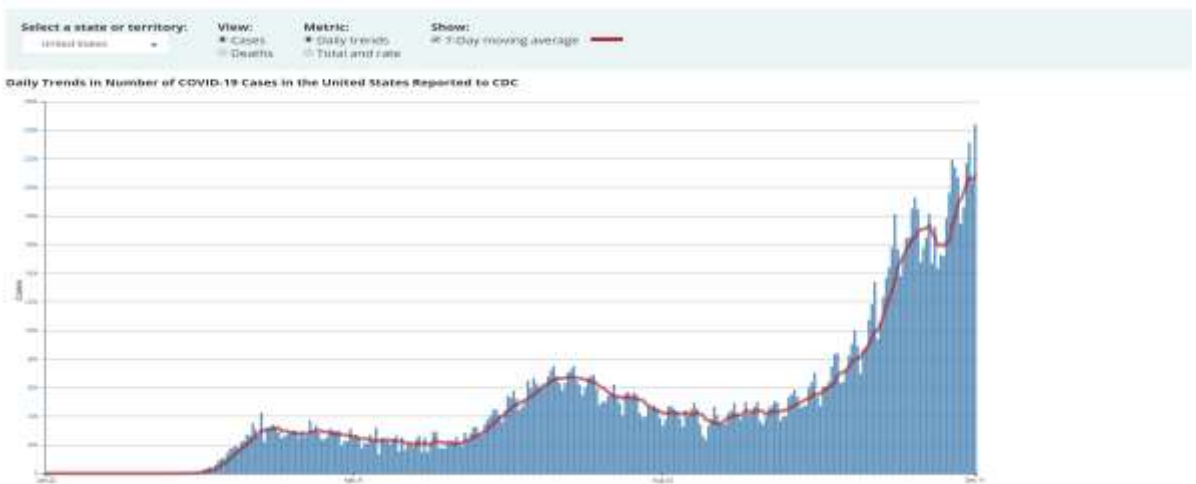
- Spike in COVID infection expected and predicted
- Winter, more indoor activities
- Holidays, family gatherings
- Pandemic Fatigue



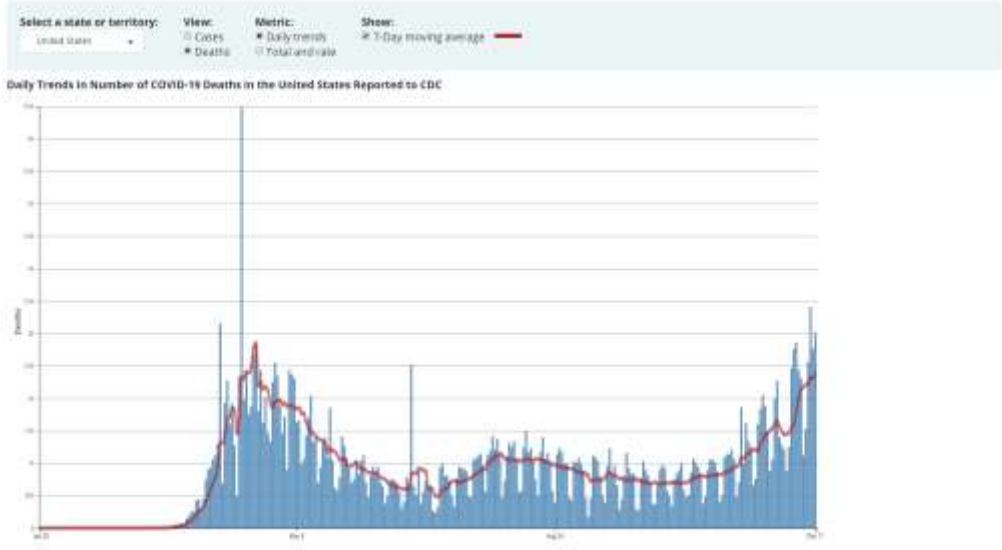
How bad is it?

- COVID -19 is now leading weekly cause of death in US
- Third leading cause of deaths this year
- Average 2 COVID-19 deaths per minute in this country

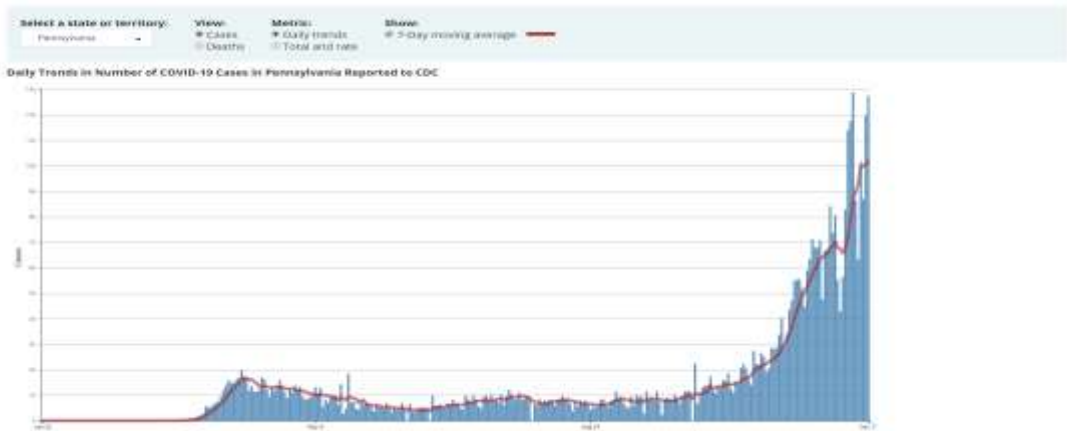
COVID – 19 US Daily Cases



COVID-19 Deaths US



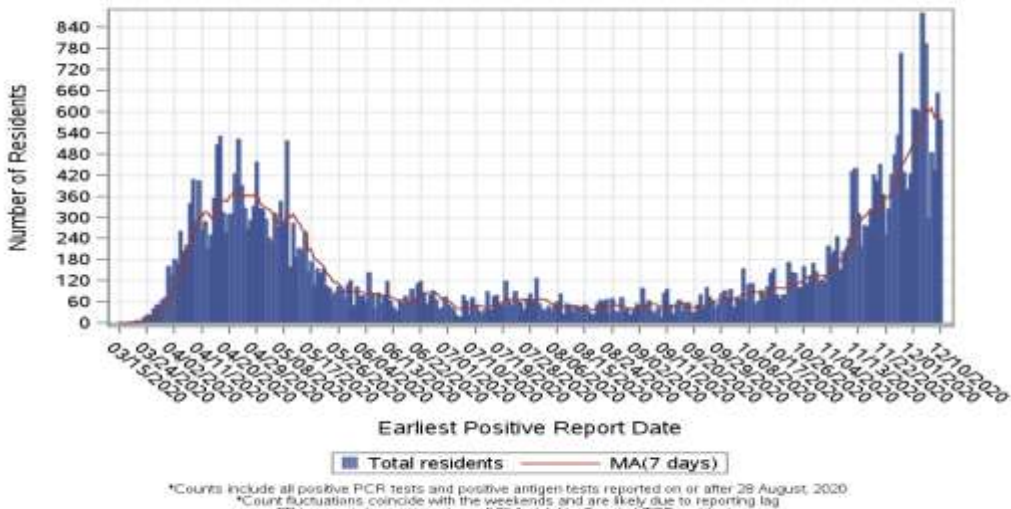
Pennsylvania COVID cases



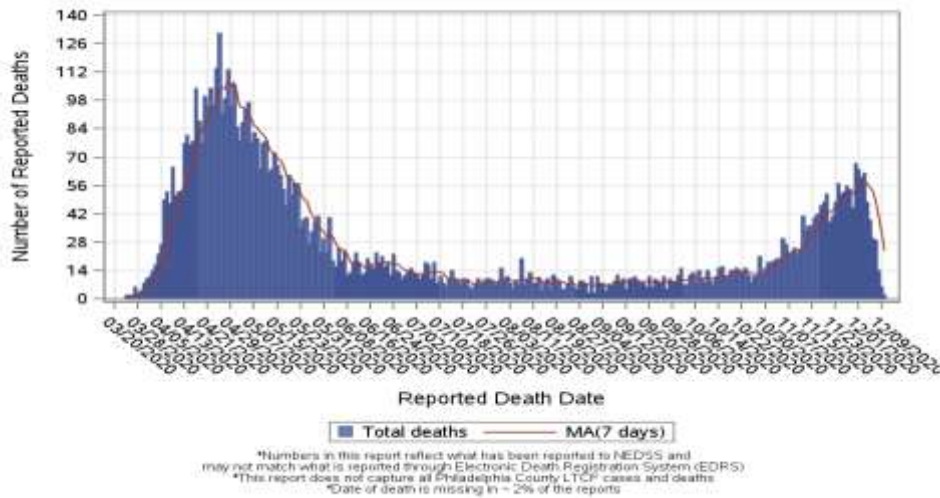
Lancaster County COVID cases



COVID -19 cases in ECFs 12/10/20



COVID -19 Deaths in LTC facilities

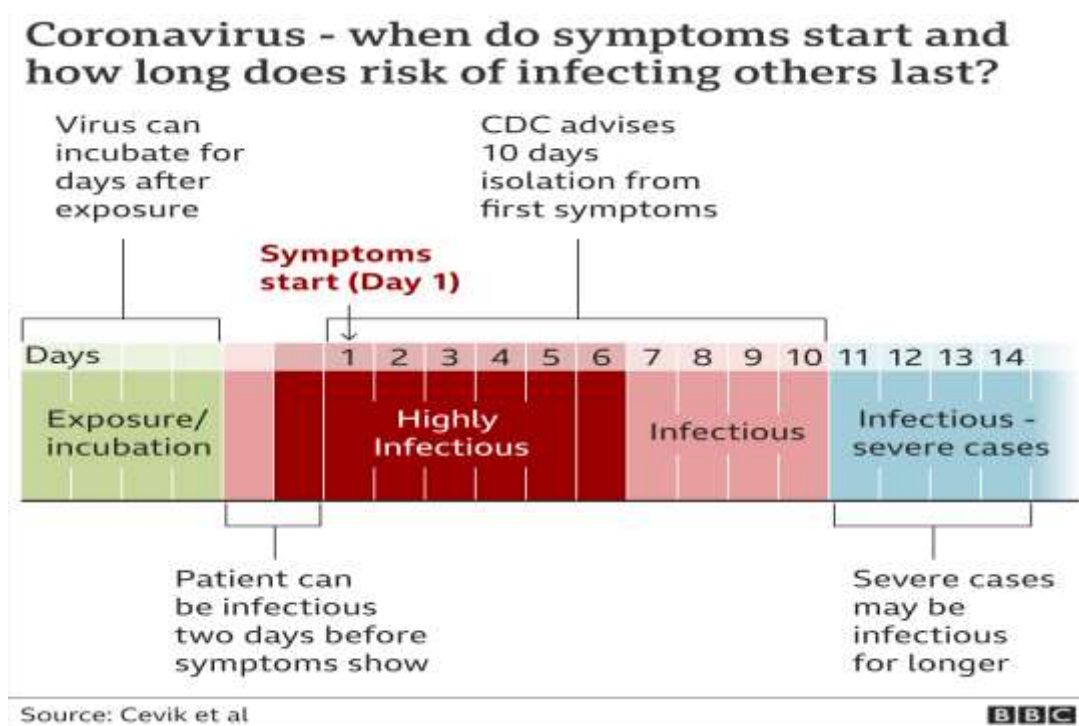


“Perfect Storm”

- High risk conditions, elderly
- Living in close proximity, may not wear masks or do social distancing
- Staff unable to social distance/provide care
- Enters communities through asymptomatic staff

COVID-19 at St Annes

	Positive	Deaths	Recovered
Residents in Skilled and Assisted living	15	2	5
Staff	16	0	13



Transmission of COVID-19

- Droplet, airborne transmission unlikely
- Most infectious in first 5 days of symptoms
- Infectious 2 days before symptoms
- Touching surfaces – not as important as inhalation
- Mostly inhaled, touching face, eyes

Asymptomatic Carriage

- 30 -50% of positives may lack symptoms
- Some may be “presymptomatic”
- Community “Silent Spread”
- Just as infectious as symptomatic

COVID – 19 Mitigation at St Annes

- Full PPE for staff
- Limit traffic on units
- Cohort positive residents
- Frequent testing of residents and staff

COVID Testing of LTC Staff

Facility COVID -19 Activity	County COVID Positivity Rate	Testing Frequency
Low	<5%	Monthly
Medium	5% - 10%	Weekly
High	>10%	Twice a week

PCR Testing



- “Gold standard”
- Very sensitive
- Detects viral genetic material

POC Antigen Testing



Antigen Testing

- POC, sample processed in 15 minutes
- Detects presence of viral protein, not RNA
- Most sensitive at time of most infectivity
- Reliable if positive, will miss some cases later in course

There is a
light at the
end of this
dark tunnel...




Treatment of COVID -19

- Remdesevir - antiviral , shortens course of disease, no survival benefit
- Dexamethasone- steroid anti-inflammatory, improves survival
- Plasma- Infuse antibodies from those who have recovered

COVID Monoclonal antibodies

- Same technology as used to treat cancers
- 2 approved by the FDA, for prevention of hospitalization
 - Regeneron
 - Eli Lilly
- Target the virus “spike” protein
- Supplies limited



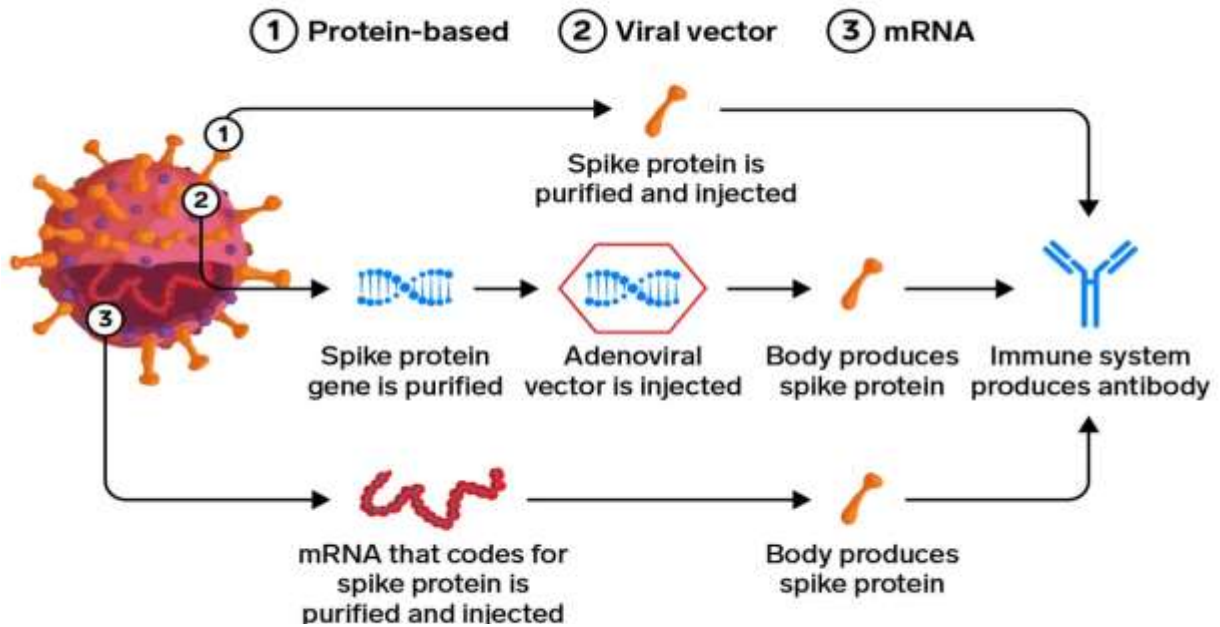
COVID -19 Vaccine



Coronavirus Vaccines

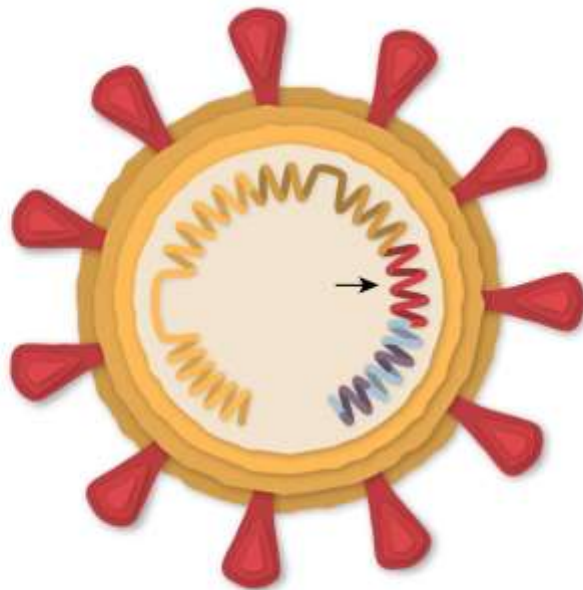
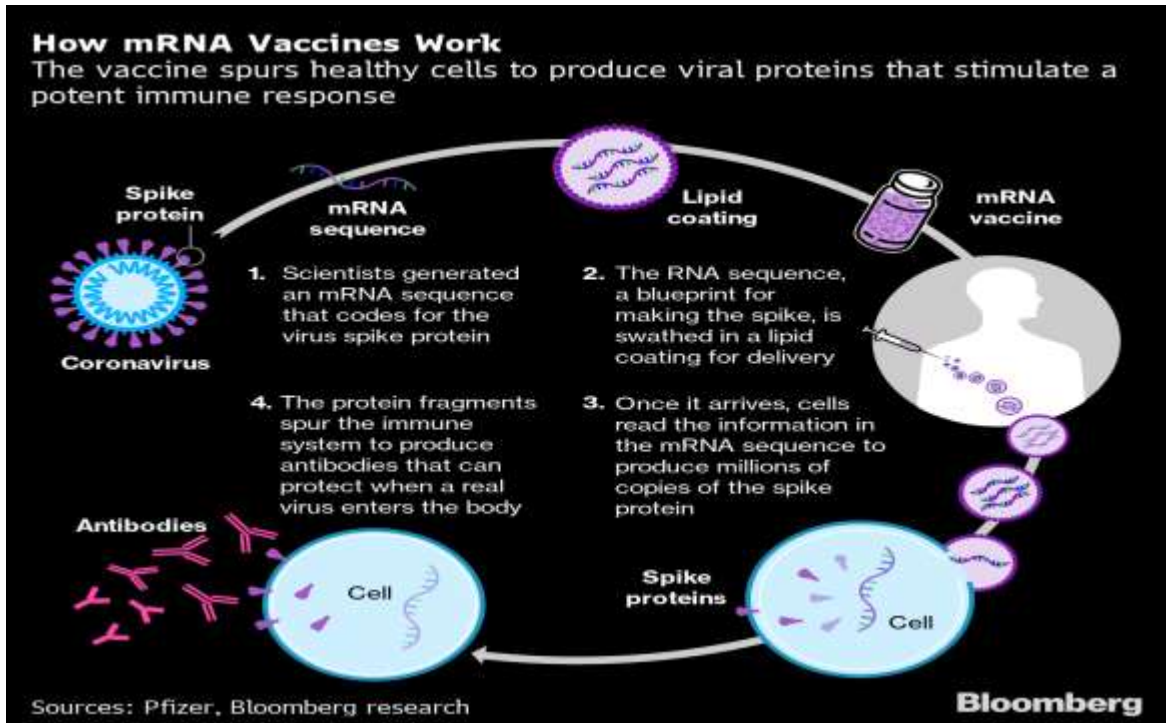
- 58 currently in human trials
- Induce body's immune system to prevent illness
- Safer and more effective than getting COVID-19 "naturally"
- The only way this pandemic is going to end soon

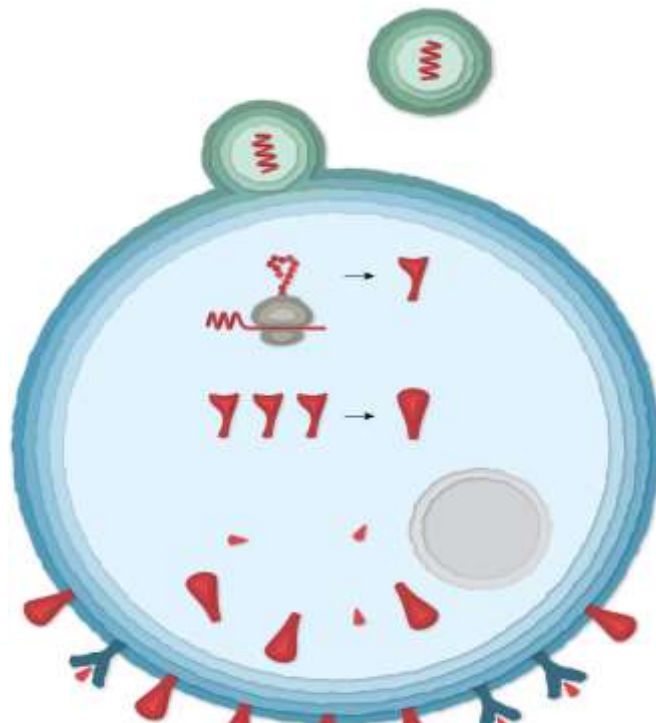
Three types of coronavirus vaccines in development

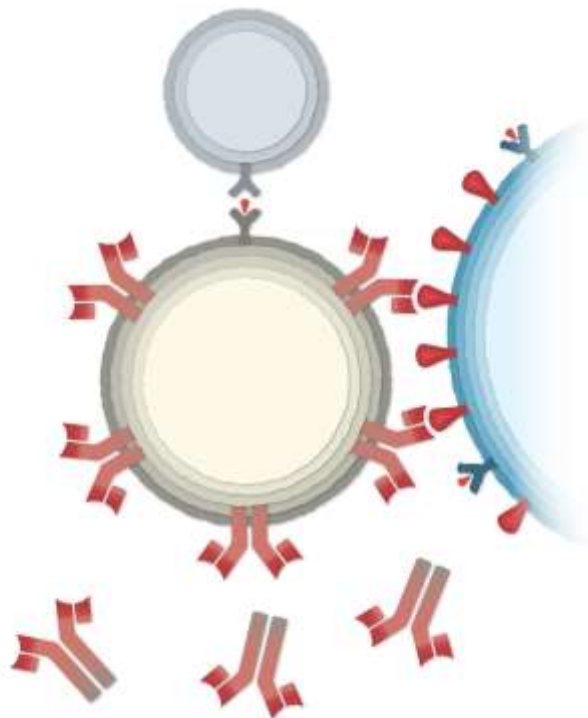
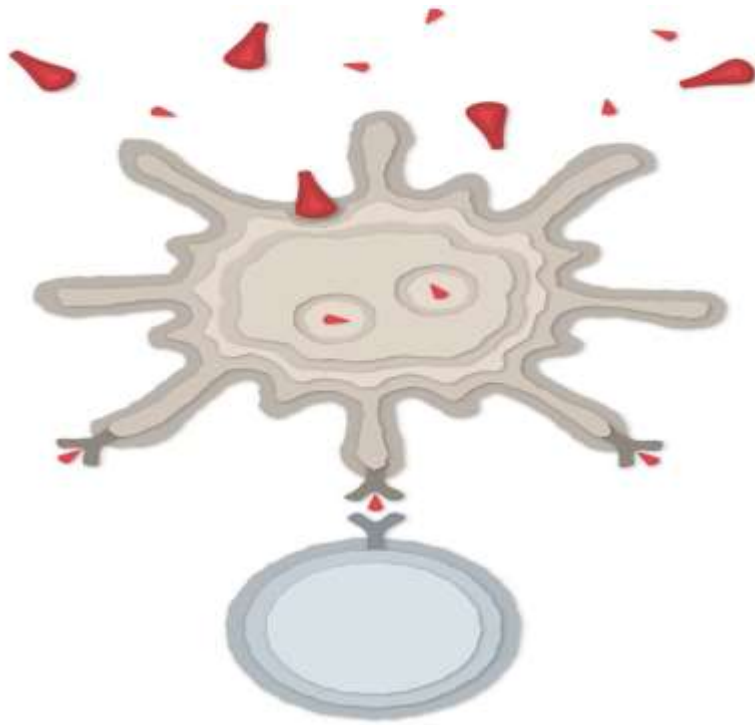


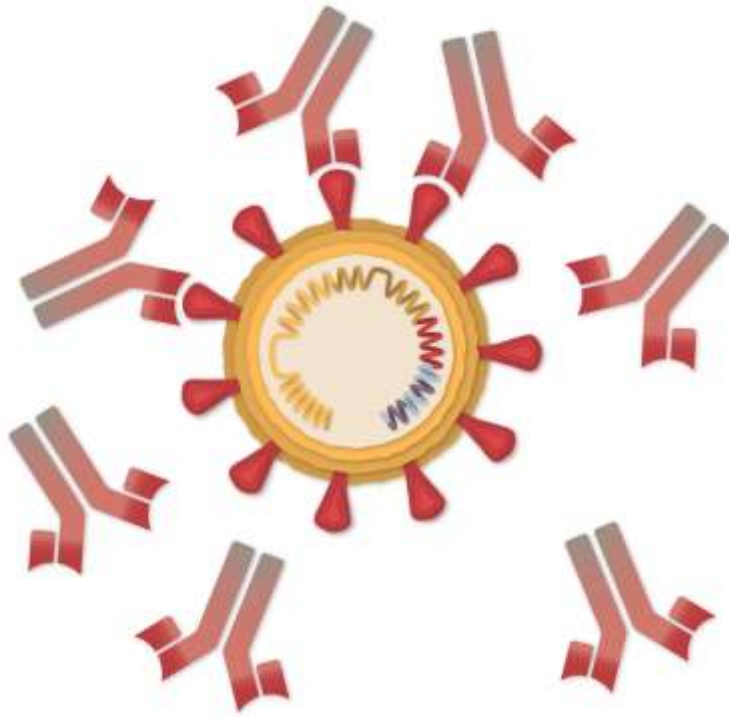
COVID mRNA vaccines

- Cannot give you COVID
- Do not contain live or killed virus
- Technology used for 10 years in cancer treatment
- Safe and highly effective
- 2 doses required





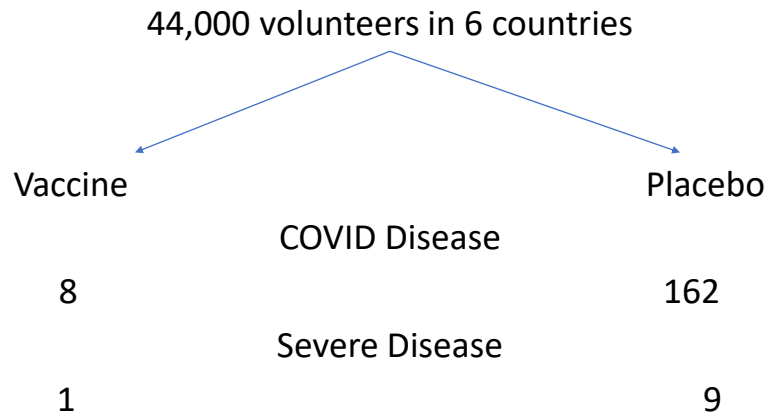




Pfizer COVID vaccine approved by FDA 12/11



Pfizer Phase 3 vaccine trial - 95% effective



Moderna Vaccine Approval expected soon



Moderna Phase 3 Vaccine Trial – 94.1% effective

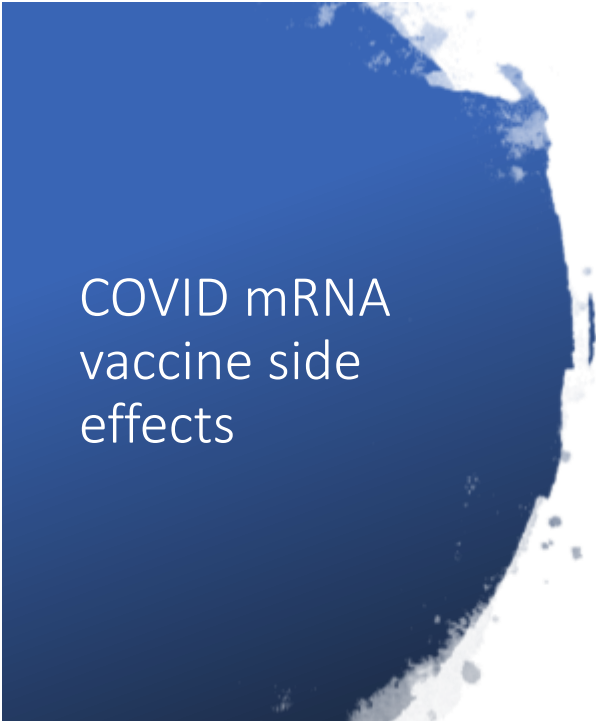
30,000 volunteers	
Vaccine	Placebo
COVID disease	
11	185
Severe disease	
0	30

COVID mRNA vaccine in seniors

- Both vaccines protected seniors
- Moderna -7,500 >65yrs, 87% effective
- Pfizer – 18,000 56-85yrs, 94% effective

COVID vaccination in ECFs

- Must be kept very cold, special freezers -90oF
- Walgreens , CVS to administer to residents and staff
- Details are being finalized, may happen before end of year



COVID mRNA vaccine side effects

- fatigue, headache, muscle pain, chills, fever and pain at injection site after vaccination.
- May persist for 1-2 days
- Similar to Shingrix
- Normal, expected and means body is responding appropriately

Vaccines: What we don't know yet

- How long will protection last
- Whether it will prevent transmission of virus to others

COVID vaccine myths

- Can cause COVID
- Had COVID so don't need vaccine
- Derived from fetal cells
- Involves microchip implantation
- Causes severe side effects



Masks

- Most effective means of decreasing transmission
- Will also protect wearer of mask
- Reduce community spread by “well”/asymptomatic
- Reduce spread in healthcare settings

COVID Prevention at St Annes

- Wear masks/eye shield
- Hand washing/disinfection
- Social distancing

COVID Prevention at St Annes

- Risk to LTC residents dependent on behavior of staff in homes/community
- Risk to LTC facilities increased by surrounding community positivity rate
- Outdoors safer than indoors



Finding the
Right
Balance



THANK YOU !

