COVID-19 & Surgery in Arizona

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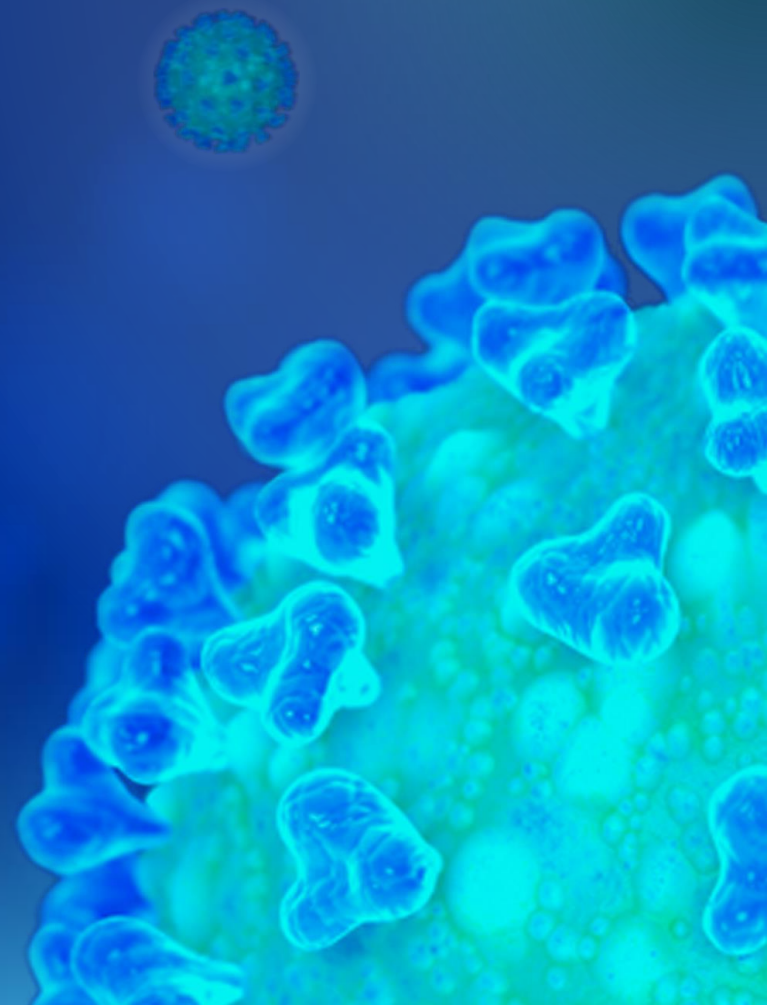
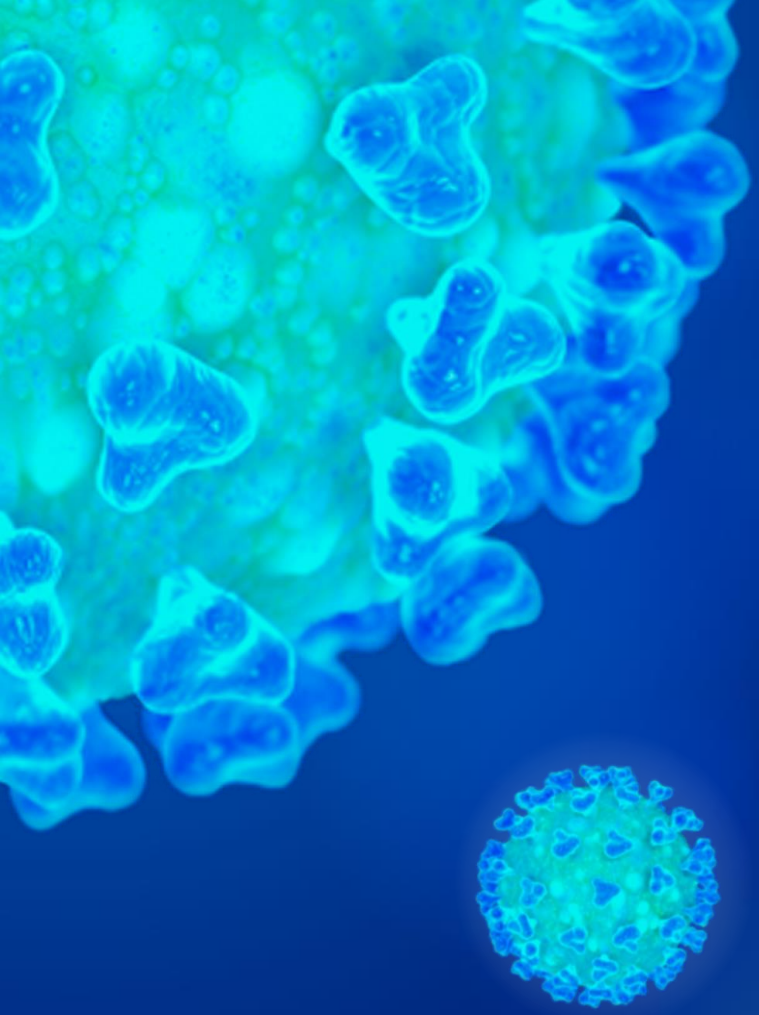
“We cannot say this loudly enough or clearly enough or often enough: All countries can still change the course of this pandemic”

—DR. TEDROS ADHANOM GHEBREYESUS, WORLD HEALTH ORGANIZATION’S DIRECTOR GENERAL





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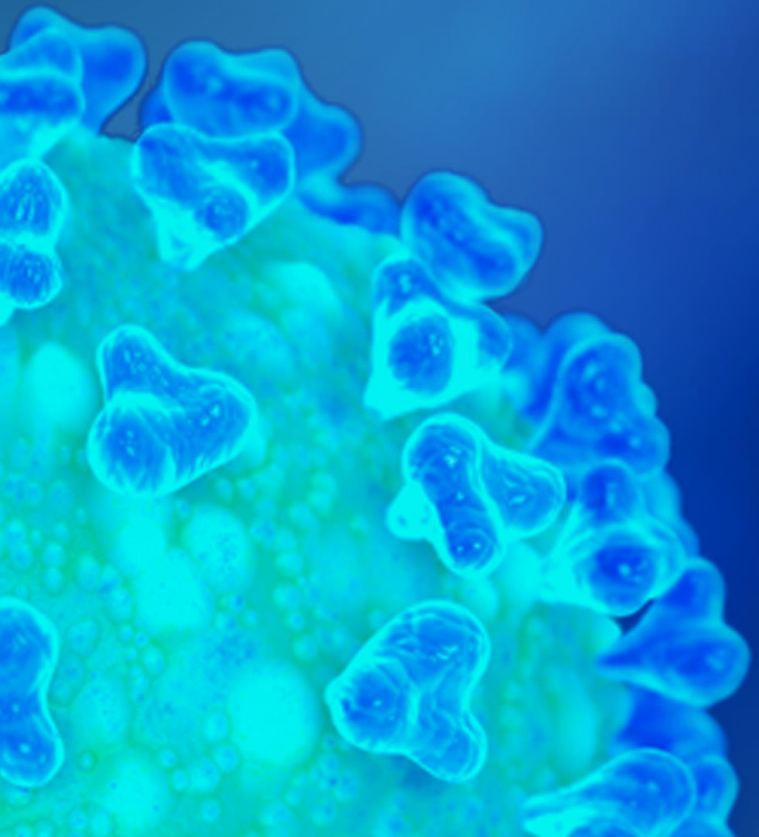
ABOUT CORONAVIRUS



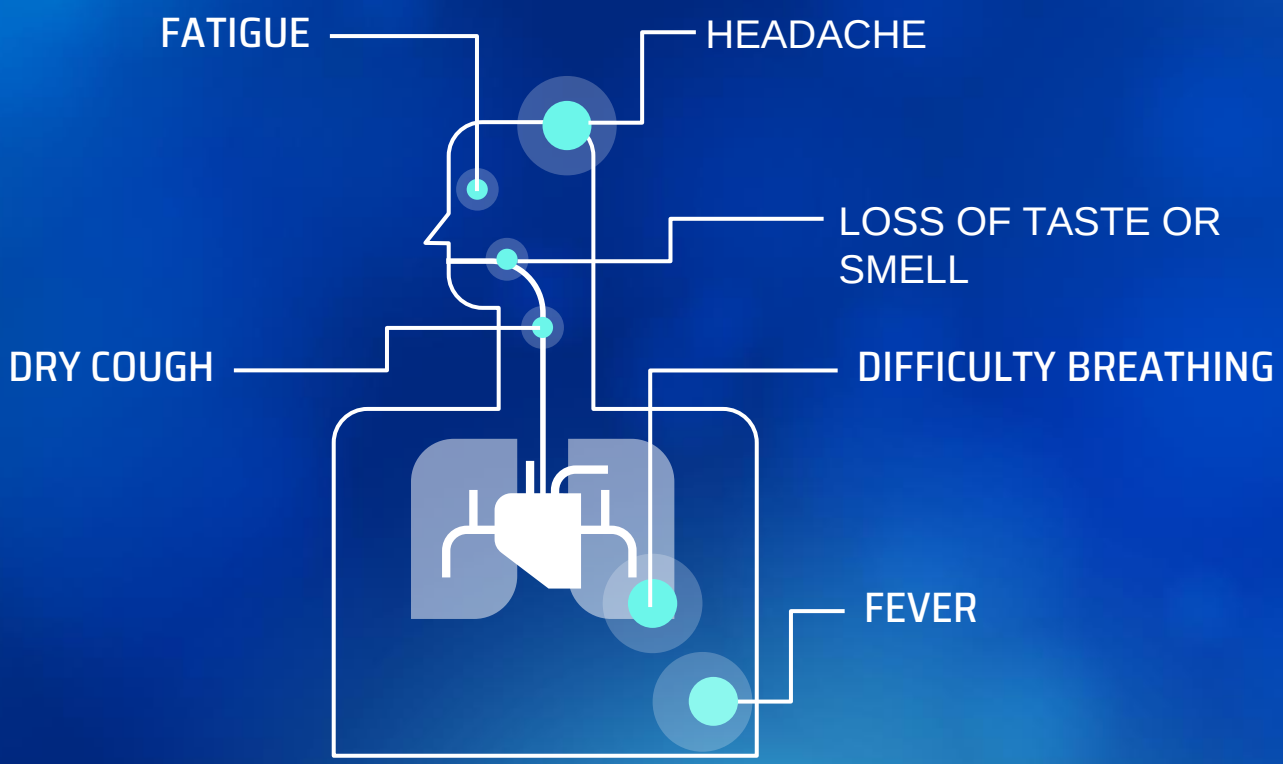
COVID-19

COVID-19 is an infectious disease caused by the recently found virus, SARS-CoV-2 (or coronavirus). Before the outbreak originated in Wuhan, China on December 2019, there was no information about this virus

BACKGROUND INFORMATION

- COVID-19 is the name of the “novel coronavirus” disease
- SARS-CoV-2 is the name of the virus that causes COVID-19
- Coronaviruses usually cause mild respiratory illnesses, such as the common cold
  - Severe Acute Respiratory Syndrome (SARS)
  - Middle East Respiratory Syndrome (MERS)
- COVID-19 is a new coronavirus disease that emerged from Hubei Province, China in December 2019

COMMON SYMPTOMS



HOW DOES IT SPREAD?

PEOPLE

From person to person through small droplets from the nose or the mouth when the infected person coughs or exhales

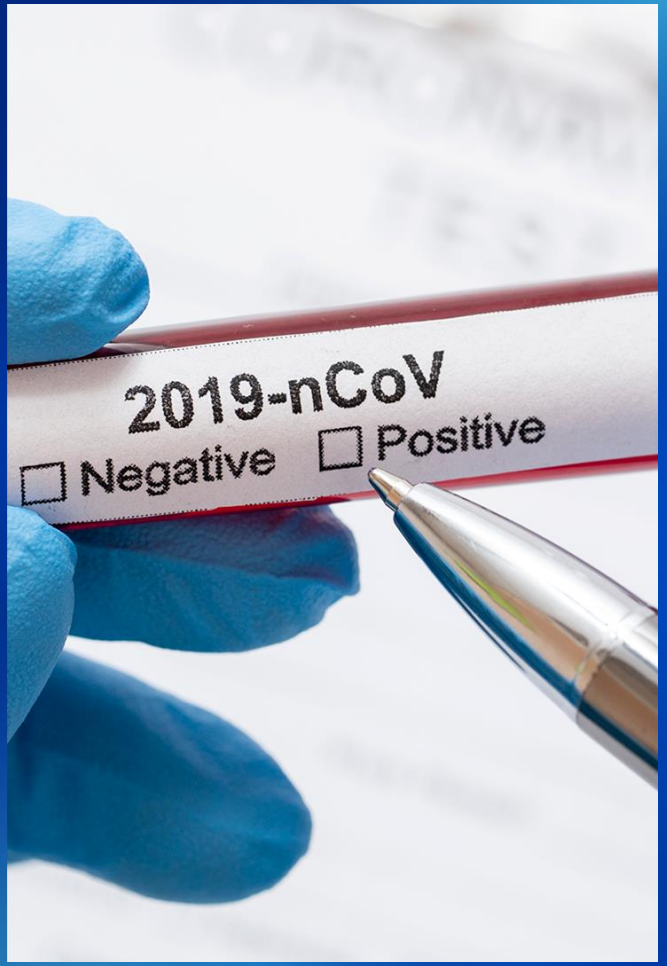
SURFACES

These small droplets land on surfaces, which means any person that touches these surfaces and then their eyes, nose or mouth can become infected

- Virus can survive for variable periods of time on different surfaces
  - Copper – 4 hours
  - Plastic & stainless steel – 3 days
- Airborne transmission, while uncommon, is possible

ASYMPTOMATIC SPREADERS

Approximately 80% of people infected with COVID-19 show little to no symptoms, especially during the first stages of the disease.



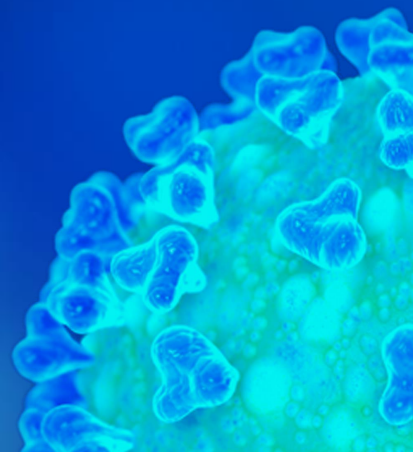
HOW SOON DO SYMPTOMS DEVELOP?

- Symptoms typically begin 2 to 14 days after exposure.
- Approximately 20% of asymptomatic people who test positive for COVID-19 will remain symptom-free over time.
- Almost 60% of all transmission came from asymptomatic transmission.


ABOUT 80% OF PEOPLE
RECOVER FROM THIS
DISEASE WITHOUT
NEEDING SPECIAL
TREATMENT

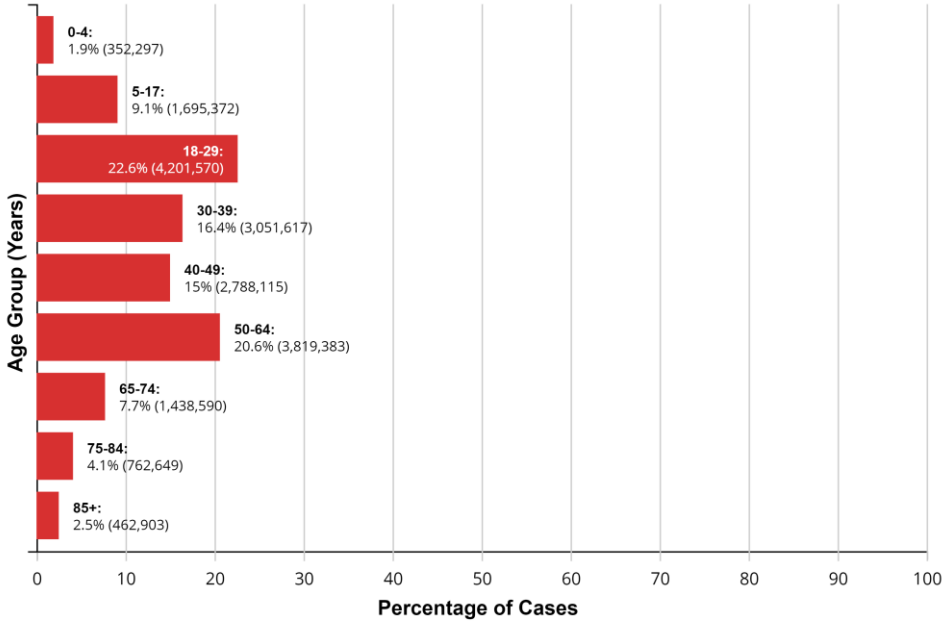
02

STATS ABOUT CORONAVIRUS

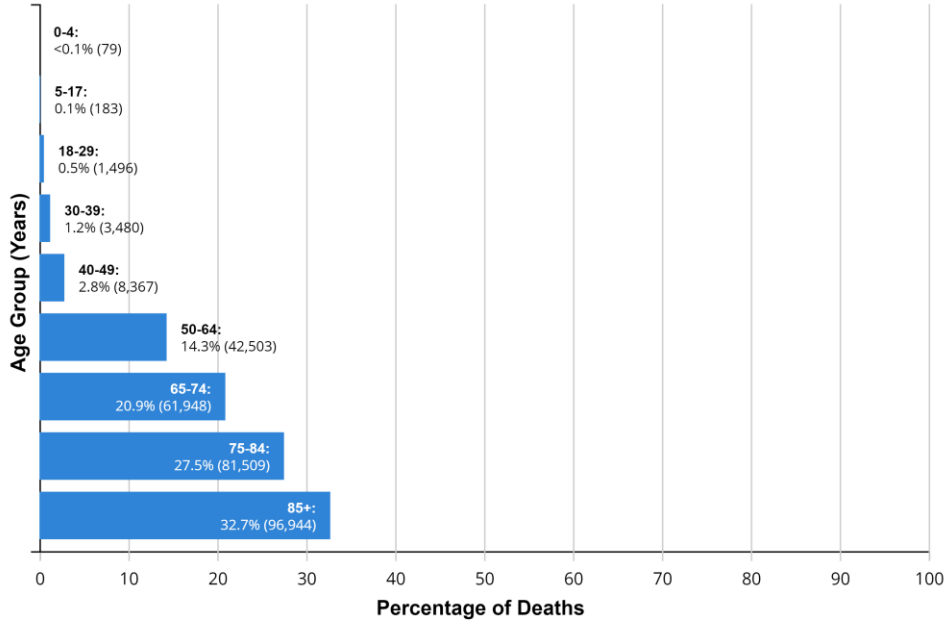


CASES AND MORTALITY BY AGE GROUP

CASES BY AGE GROUP

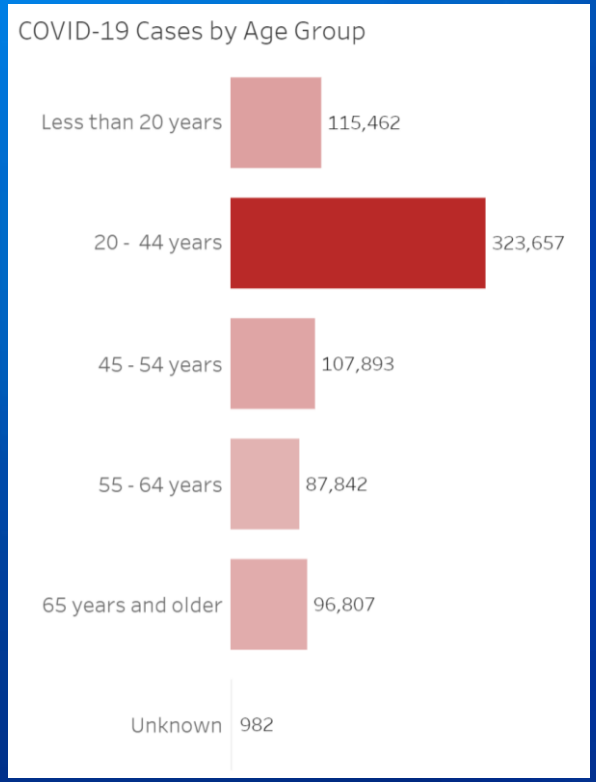


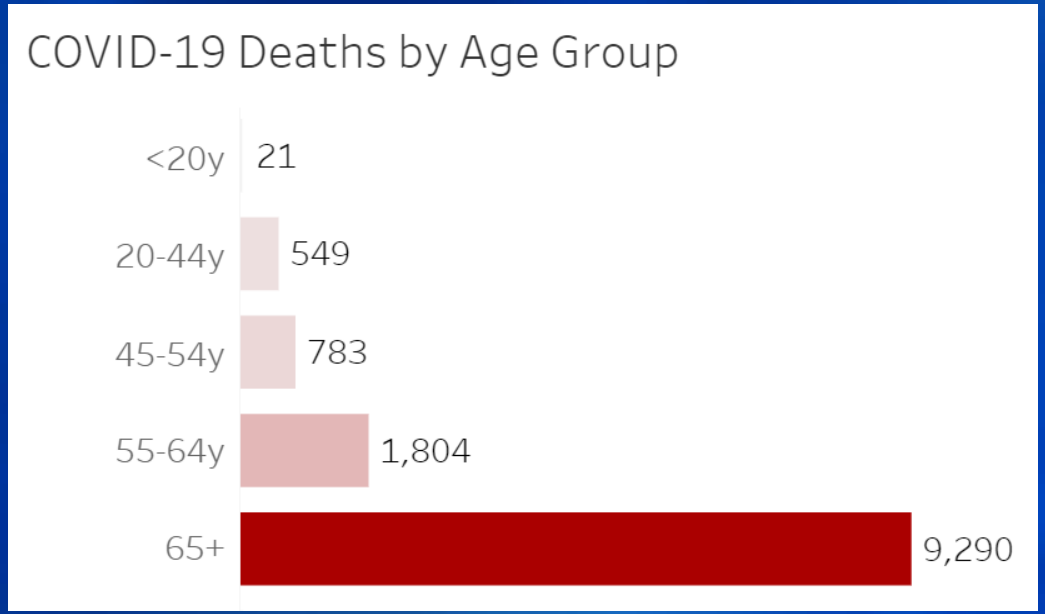
MORTALITY BY AGE GROUP



CDC COVID Data Tracker

CASES AND MORTALITY BY AGE GROUP IN ARIZONA





ADHS - Data Dashboard (azdhs.gov)

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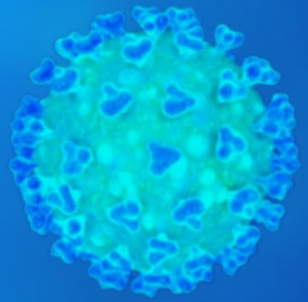
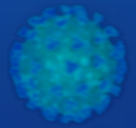
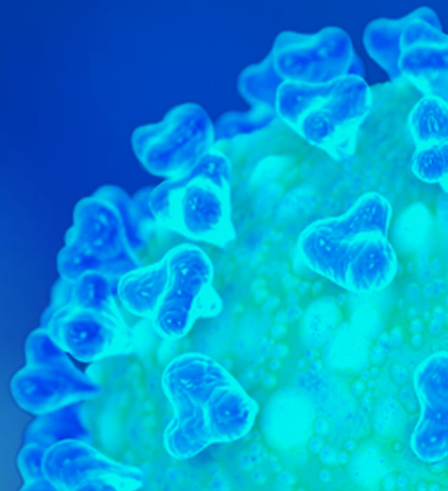
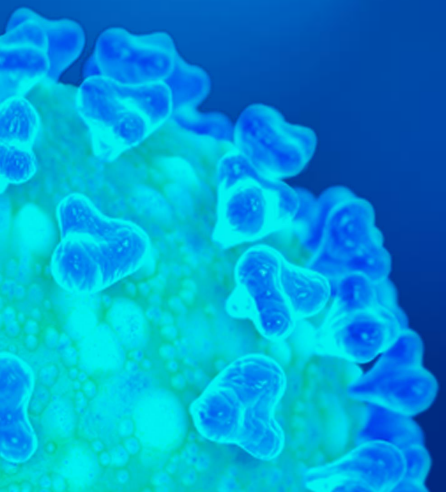
PREVENTION MEASURES







ANTIBIOTICS DO NOT WORK AGAINST CORONAVIRUS



PROTECTING YOURSELF & PREVENTING SPREAD

WEAR A MASK OVER YOUR NOSE AND MOUTH

SOCIAL DISTANCING

AVOID TOUCHING YOUR FACE

CLEAN & DISINFECT FREQUENTLY TOUCHED OBJECTS & SURFACES

WASH HANDS WITH SOAP & WATER FOR 20 SECONDS OR USE ALCOHOL-BASED HAND SANITIZER

STAY HOME IF YOU'RE SICK

VACCINES CURRENTLY AVAILABLE

- Two vaccines have received FDA Emergency Use Authorizations (EUAs) :
  - **Pfizer/BioNTech** – 95% effective (manufacturer data)
  - **Moderna** – 94.5% effective (manufacturer data)
- Both are mRNA vaccines with a 2-dose schedule. People being vaccinated should complete the two-dose series with the same vaccine product.
- Duration of protection is not yet known.

Sources: https://www.pfizer.com/news/press-release/press-release-detail/pfizer-and-biontech-conclude-phase-3-study-covid-19-vaccine
https://investors.modernatx.com/news-releases/news-release-details/modernas-covid-19-vaccine-candidate-meets-its-primary-efficacy

COVID-19 VACCINE TRIALS BY THE NUMBERS

- **Pfizer/BioNTech**
  - **45,302** enrolled
    - **43,125** received 2nd dose
  - **150** clinical sites
    - 39 U.S. states
  - Racial/ethnic distribution
    - **13% -** Hispanic
    - **10% -** African American
    - **6% -** Asian
    - **1% -** Native American
  - **40%** ages 56-85

- **Moderna**
  - **30,000** enrolled
    - **25,654** received 2nd dose
  - **89** clinical sites
    - 32 U.S. states
  - Racial/ethnic distribution
    - **63%** - White
    - **20% -** Hispanic
    - **10% -** African American/Black
    - **4% -** Asian
    - **3% -** All others
  - **64%** ages 45 and older
    - **39%** ages 45-64
    - **25%** ages 65+

Sources: https://www.pfizer.com/science/coronavirus/vaccine; https://www.modernatx.com/cove-study
For more information, visit www.clinicaltrials.gov

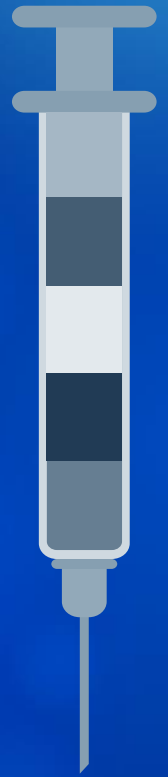
COVID-19 VACCINE TRIALS BY THE NUMBERS

- At least 8 weeks of safety data were gathered after participants received their 2nd dose in the trials. It is unusual for side effects to appear more than 8 weeks after vaccination.
- These mRNA vaccines produce common side effects after vaccination, especially after the 2nd dose.
    - Side effects may include:
        - Fever
        - Headache
        - Muscle aches
- No significant safety concerns were identified in the clinical trials, although a small number of severe allergic reactions have been reported during the initial phases of rollout.

Source: https://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/covid-19/clinical-considerations.html

THE VACCINE

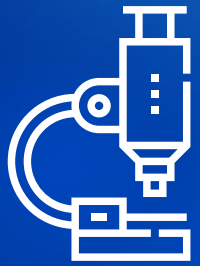
- mRNA vaccines carry genetic material that teaches cells how to make a harmless piece of “spike protein,” which is found on the surface of the SARS-CoV-2 virus.
  - Genetic material from the vaccine is destroyed by our cells once copies of the spike protein are made and it is no longer needed.
- Cells display this piece of spike protein on their surface, and an immune response is triggered inside our bodies. This produces antibodies to protect us from getting infected if the SARS-CoV-2 virus enters our bodies.
- mRNA vaccines do not affect our DNA.
- mRNA COVID-19 vaccines cannot give someone COVID-19.



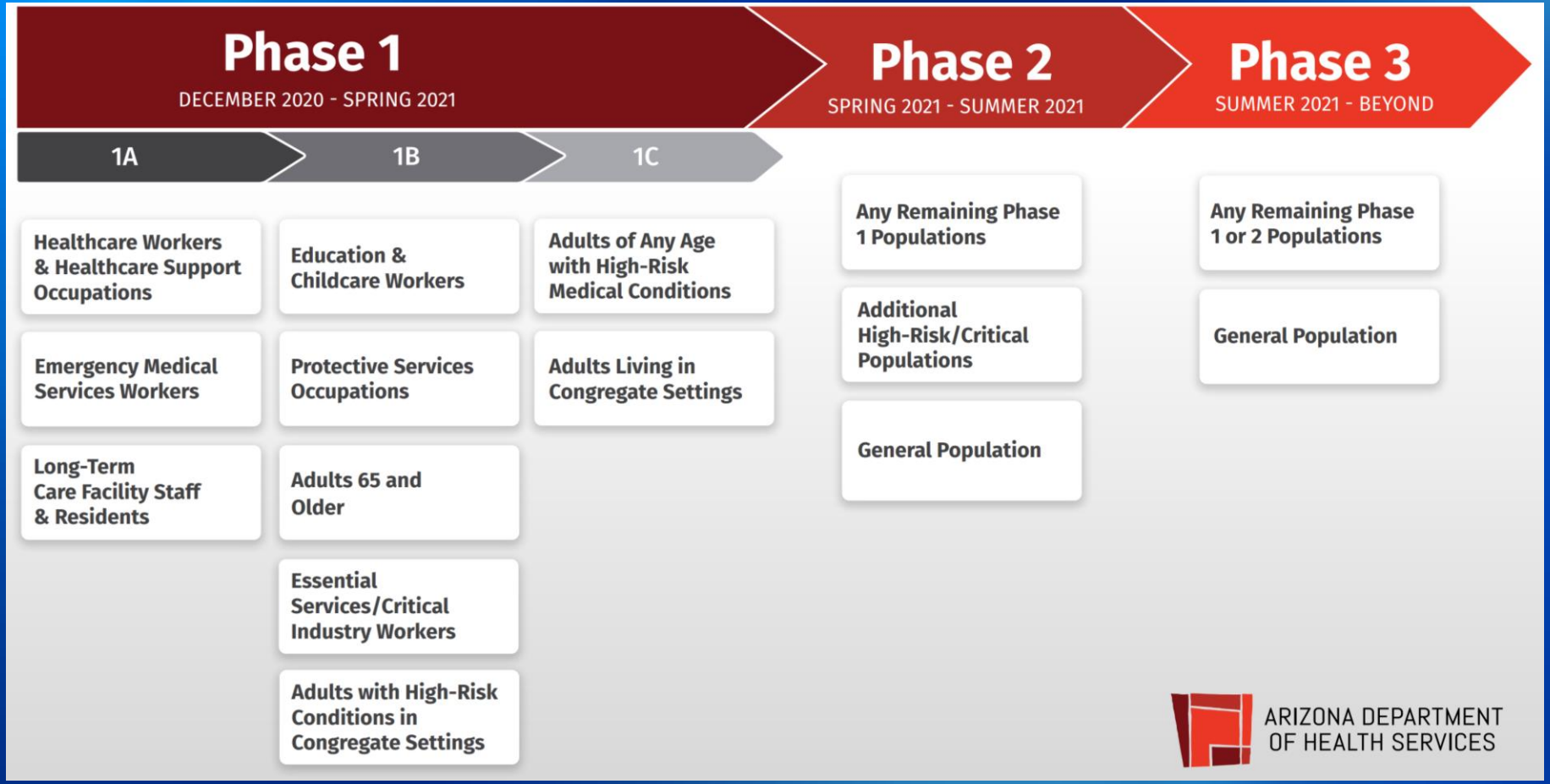
Sources: College of Physicians of Philadelphia. What is an mRNA vaccine? https://historyofvaccines.blog/2020/07/29/what-is-an-mrna-vaccine/
JAMA. COVID-19 and mRNA Vaccines—First Large Test for a New Approach. https://jamanetwork.com/journals/jama/fullarticle/2770485

HOW WAS IT DEVELOPED SO QUICKLY?

- Researchers used existing clinical trial networks to begin conducting COVID-19 vaccine trials.
- Manufacturing started while the clinical trials were still underway. Normally, manufacturing doesn't begin until after completion of the trials.
- mRNA vaccines are faster to produce than traditional vaccines.



ARIZONA VACCINE PRIORITIZATION



HOW HAS THE PANDEMIC AFFECTED SURGERY?

- Ability to perform elective surgery is based on hospital capacity, availability of PPE, and pre-operative COVID testing.

REQUIREMENTS TO PERFORM ELECTIVE SURGERY

- 14 day supply of PPE without reliance on state or county health department.
- Adequate staffing and bed availability with no greater than 80% of total bed capacity occupied.
- COVID-19 testing plan to test all at-risk healthcare workers and each patient prior to scheduling elective surgery.
- Universal symptom screening process for all staff, patients, and visitors prior to entry into the facility.
- Enhanced cleaning process for patient and waiting areas.
- COVID-19 testing plan for patients transferring to nursing care institution, residental care institution, or group home.
- Implementation of policies and procedures that prioritize elective surgeries based on urgency.

QUESTIONS?

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