

COVID19 Vaccines

WHY DO COVID19 VACCINES MATTER TO EACH OF US?

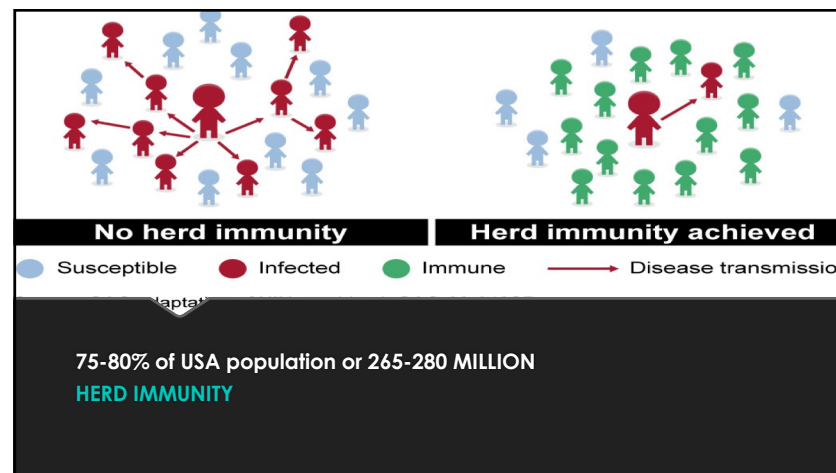
Donna L. Willis, MD, MPH

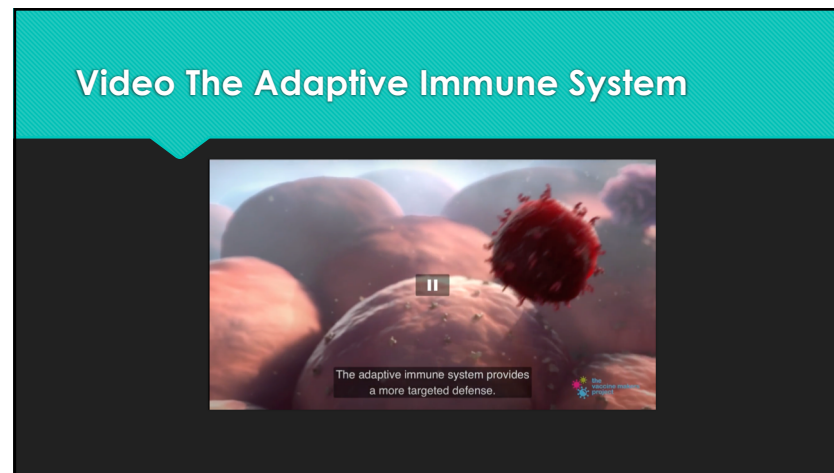
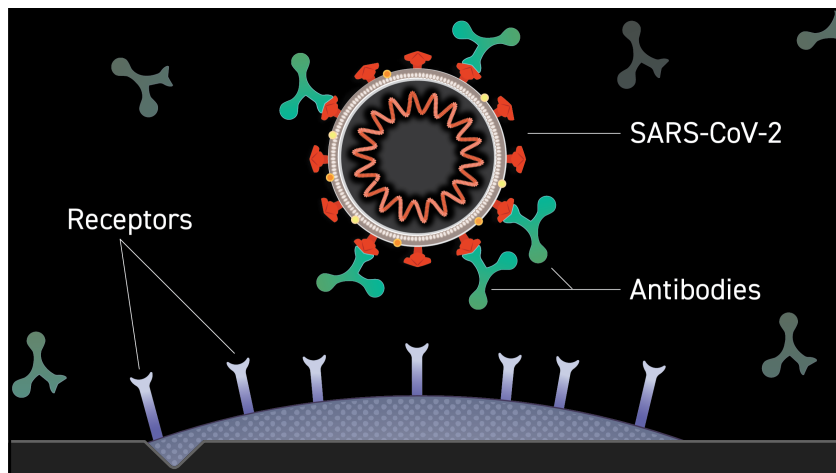
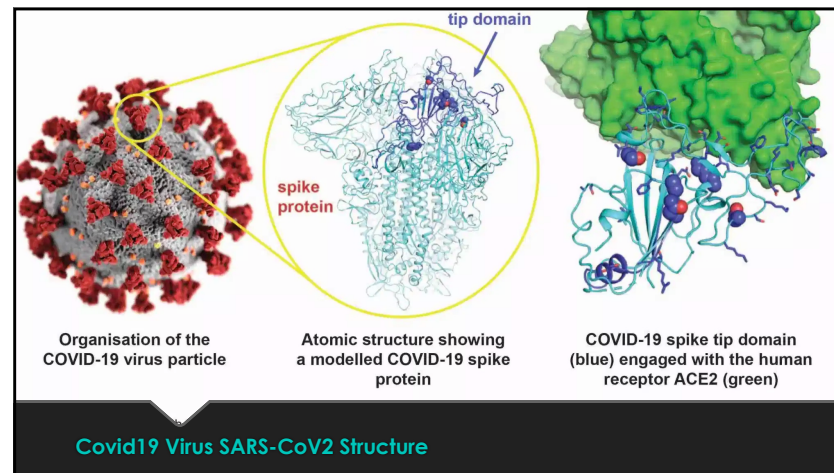
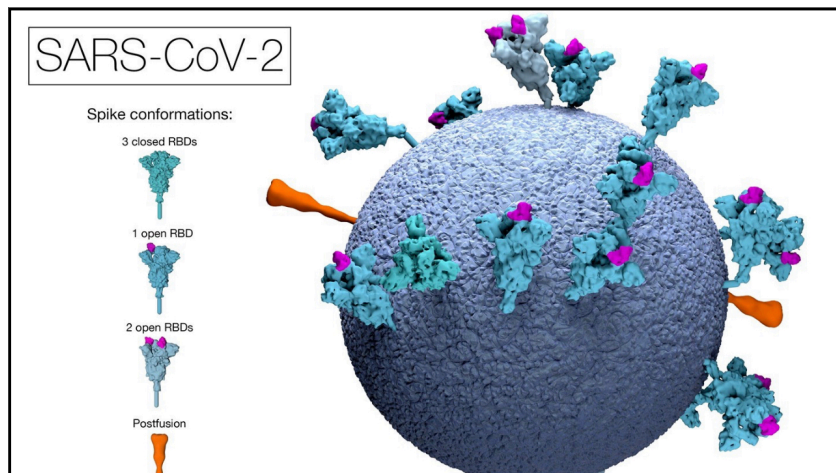
France 24 | I Won't Take The Risk

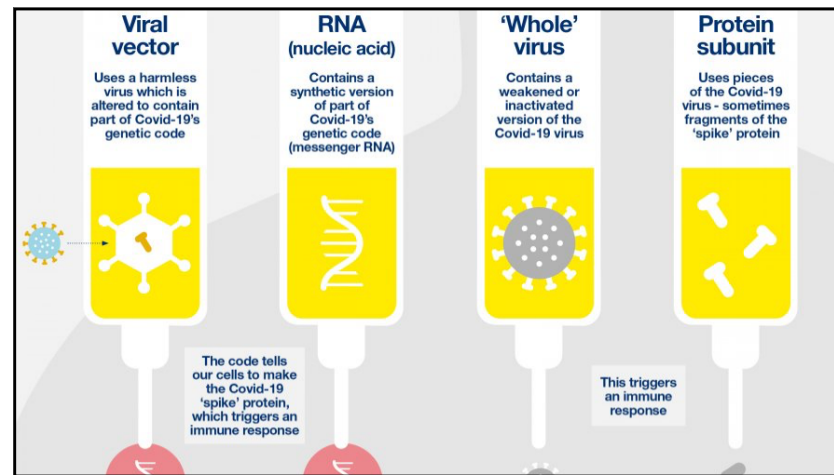
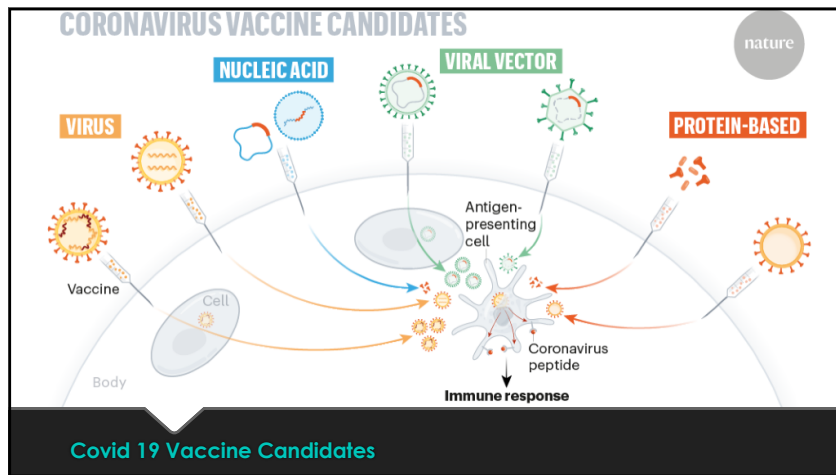


WHY Do Covid19 Vaccines Matter to Each of Us?

- Do you have any medical conditions (heart, lung, diabetes, etc.)?
- Are you African American, LatinX, or multiracial?
- Do you know someone who has died from COVID19?
- Are you older than 60?
- Do you want to return to being with your friends and family?
- Do you want to return to church, eating out, and going to events without fear?

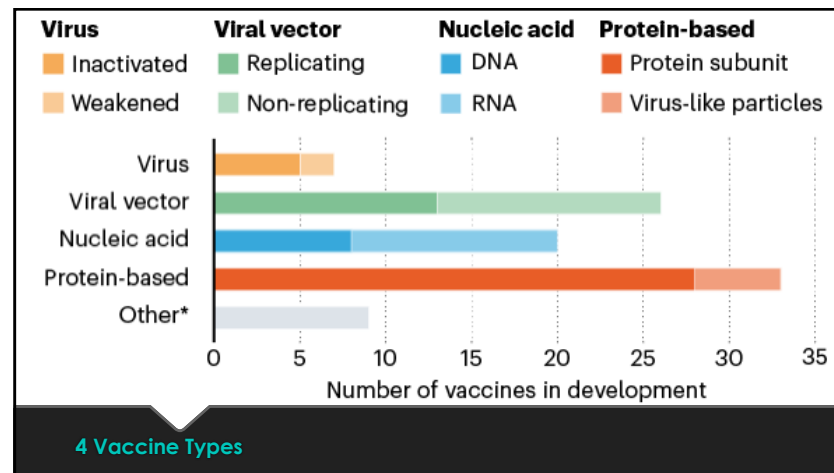






How vaccines compare

Name	Pfizer & BioNTech Covid-19 vaccine	MMR vaccine	Flu vaccine
Type	RNA – virus genetic code	Live attenuated vaccine	Inactivated virus
Doses	Two injections 21 days apart	Two injections at least 28 days apart	Annual injection
How Effective	90%	97% against measles and rubella, 88% against mumps	40%-60%
Storage	-80C	2C to 8C	2C to 8C

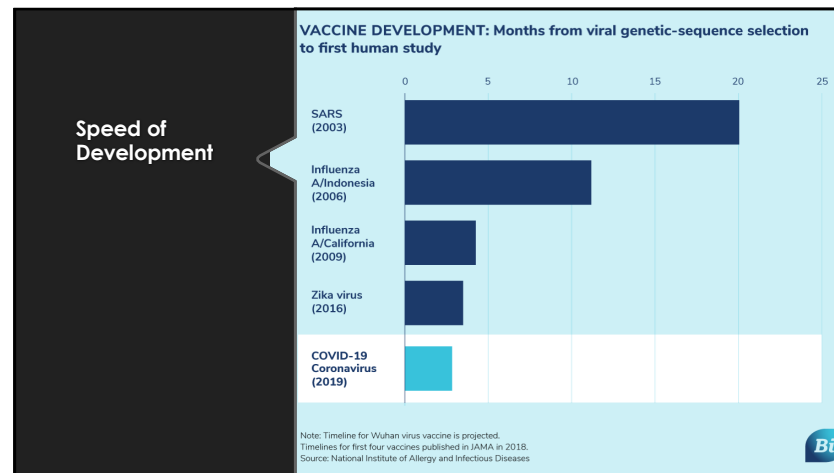


Selected covid-19 vaccines in phase-three clinical trials, 2020

Developer	Type	Doses	Participants*	Study location	Phase-3 start date
Johnson & Johnson	Viral vector	1	60,000	International	Sep 7th
AstraZeneca/Oxford University	Viral vector	2	50,000	International	Aug 28th†
Novavax	Protein subunit	2	45,000	Britain, US, Mexico	Sep 28th
Pfizer/BioNTech	mRNA	2	43,998	International	Jul 27th‡
Gamaleya (Sputnik V)	Viral vector	2	43,600	International	Sep 7th
Moderna	mRNA	2	30,000	United States	Jul 27th
Sinovac	Inactivated	2	27,980	International	Jul 21st

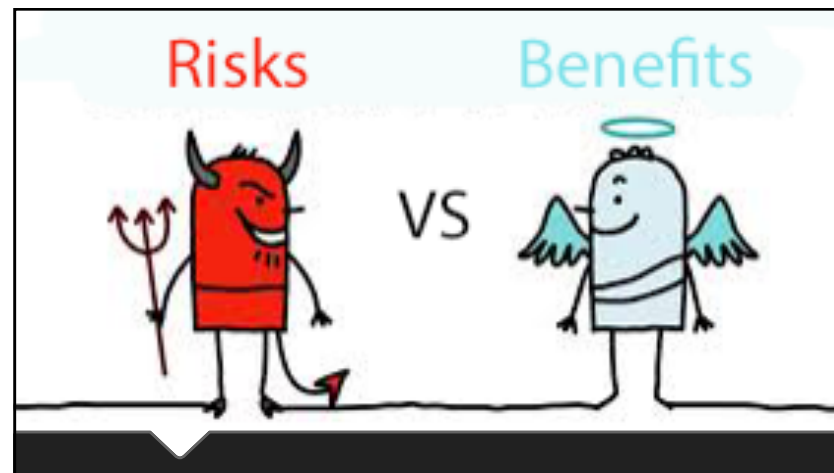
Sources: PLOS; VFA; ClinicalTrials.gov; press reports *Estimated number of enrollees in phase three †US trial ‡Announcement of phase 2/3

Covid19 Vaccine Developers & Vaccine Types



Video The Four Vaccine Types


All COVID-19 vaccines being developed aim to produce



Opinion

Find Your Place in the Vaccine Line

By Stuart A. Thompson
Illustrations by Jorge Colombo



NYT Covid 19 Vaccine Risk Tool

How old are you?

What county do you live in?

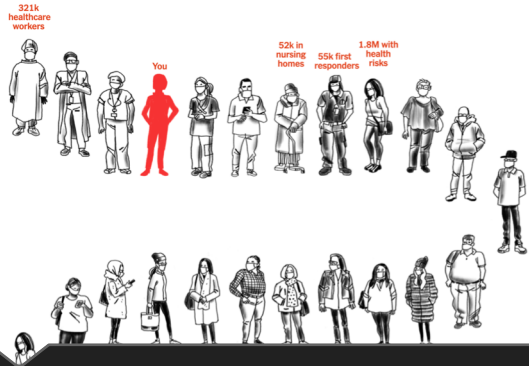
Do you work in these professions?

- Health care worker
- Essential worker
- First responder
- Teacher
- None of these

If an essential worker, you've probably been working in person throughout the pandemic in a vital industry like health, food or energy.

Do you have Covid-related health risks?

NYT Covid19 Vaccine Risk Tool



321k healthcare workers

You

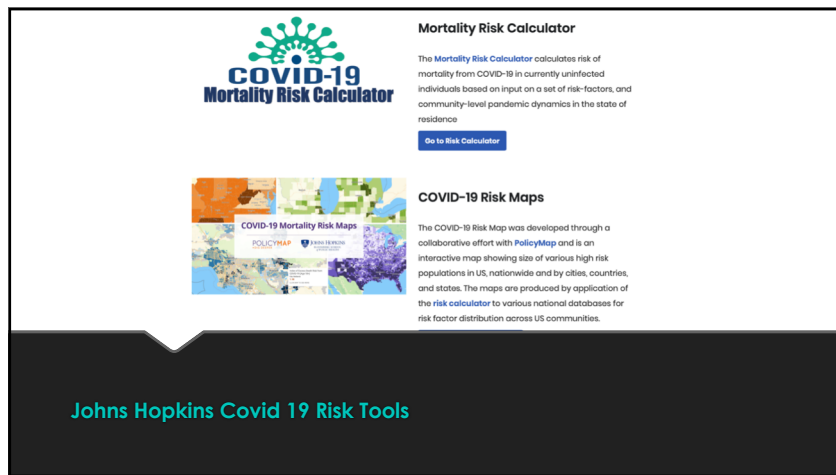
52k in nursing homes

55k first responders

1.8M with health risks

NYT Covid19 Vaccine Risk Tool





COVID-19 Mortality Risk Calculator

The Mortality Risk Calculator calculates risk of mortality from COVID-19 in currently uninfected individuals based on input on a set of risk-factors, and community-level pandemic dynamics in the state of residence

[Go to Risk Calculator](#)

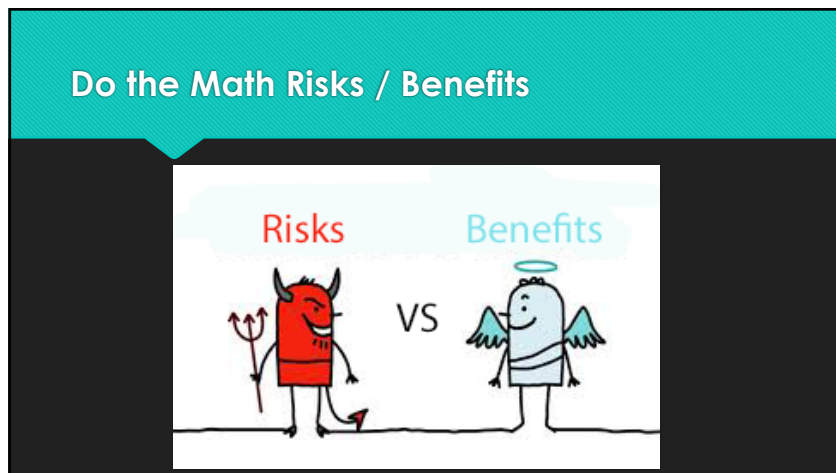
COVID-19 Risk Maps

The COVID-19 Risk Map was developed through a collaborative effort with PolicyMap and is an interactive map showing size of various high risk populations in US, nationwide and by cities, countries, and states. The maps are produced by application of the risk calculator to various national databases for risk factor distribution across US communities.

Johns Hopkins Covid 19 Risk Tools



Do the Math Risks / Benefits



Risks VS Benefits



Molecular Tests (Nucleic Acid Detection)

Diagnose active SARS-CoV-2 infections

1. Obtain Specimen: Swab.
2. Extract RNA from specimen and convert to DNA.
3. Amplify by PCR with SARS-CoV-2 specific primers.
4. Interpret results: presence of viral RNA indicates active SARS-CoV-2 infection.

Antibody Tests (Serology)

Detect immune response to SARS-CoV-2 exposure

1. Obtain Specimen: Blood Sample.
2. Expose specimen to SARS-CoV-2 specific antigens.
3. Interpret results: color change indicates previous exposure to SARS-CoV-2.

STOP COVID-19 IN ITS TRACKS

During a pandemic, as new treatments and vaccines are developed and equipment is manufactured, containing the virus spread is critical.

TEST

Testing is critical to prevent the spread. Identify cases quickly and begin treatment, tracing, and isolation earlier. The sooner testing is done, the better.

TREAT

Treatment involves care for the infected and isolation to prevent further spread.

TRACE

Contact tracing is core to stopping chains of transmission. Identify, notify and support people who have been exposed.

Until the disease is erased, the World Health Organization (WHO) recommends a comprehensive approach of testing.

Test, Trace, Isolate or Quarantine
Public Health Guideline

Video France Gestes Barrières

A COVID19 VACCINE

Your Questions

NEWSTART

An ounce of prevention is worth more than a pound of cure



The diagram consists of seven overlapping petals arranged in a circle. Each petal is a different color and contains a health-related term: Trust (purple), Nutrition (blue), Exercise (light blue), Water (yellow-green), Sunlight (yellow), Air (orange), and Rest (red).

