



COVID-19 and Faith

Emily Smith, PhD

Friendly Neighbor
Epidemiologist



Father Nathan Monk

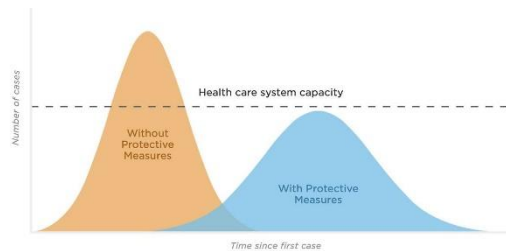
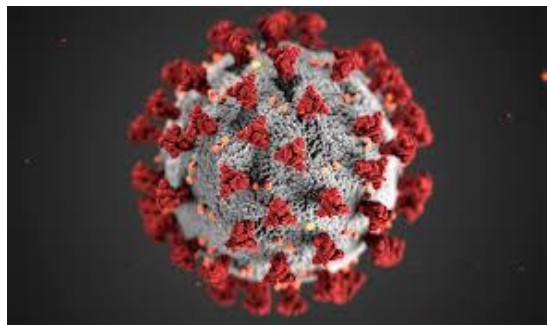
about 2 months ago



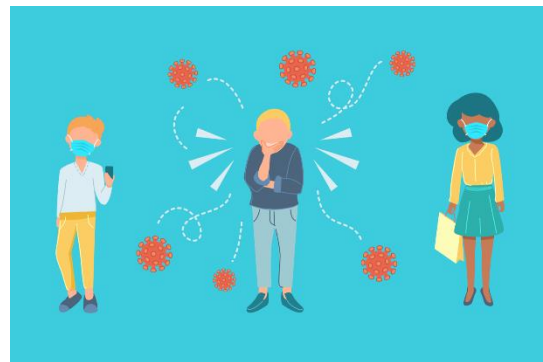
How Redeemer Presbyterian Church in New Orleans is enforcing social distancing guidelines 😂

tinyurl.com/y72wz4bm





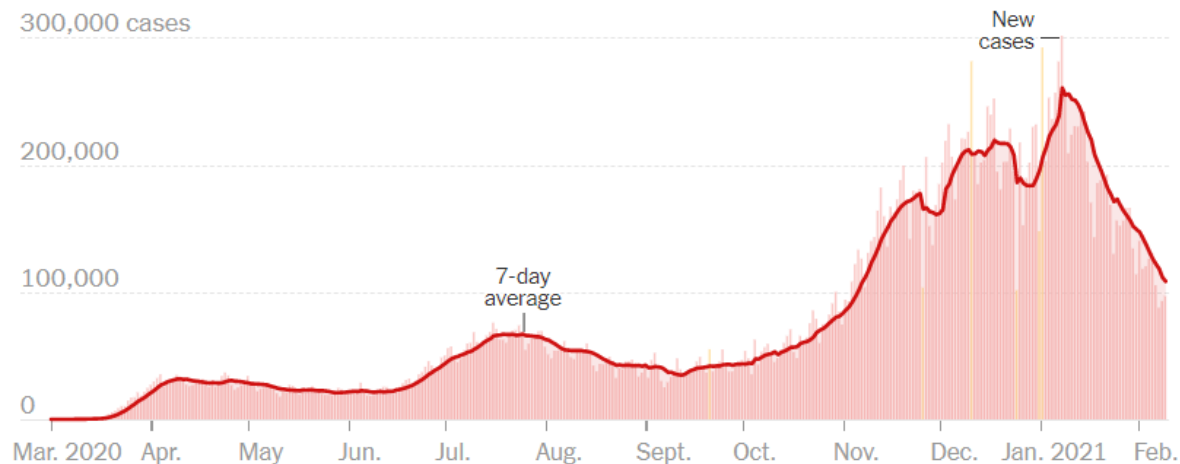
Source: CDC, Drew Harris
Credit: Connie Hanzhang, JiaNPH



What do we know?

Updated February 10, 2021, 2:08 P.M. E.T.

[Leer en español](#)



	TOTAL REPORTED	ON FEB. 9	14-DAY CHANGE
Cases	27.2 million+	96,460	-35% →
Deaths	469,438	3,167	-20% →
Hospitalized		79,179	-26% →

■ Day with reporting anomaly. Hospitalization data from the Covid Tracking Project; 14-day change trends use 7-day averages.

Recovery from COVID-19 can take a long time, even in young adults with no chronic conditions



1 in 5 previously healthy young adults* weren't back to usual health 14-21 days after testing positive

*ages 18-34

Random sample of adult outpatients with COVID-19 from 14 U.S. academic health care systems

CDC.GOV

To stay well and protect others...



Stay 6 feet away from others not living in your household



Wash hands often



Wear face coverings consistently and correctly in public

bit.ly/MMWR72420

MMWR

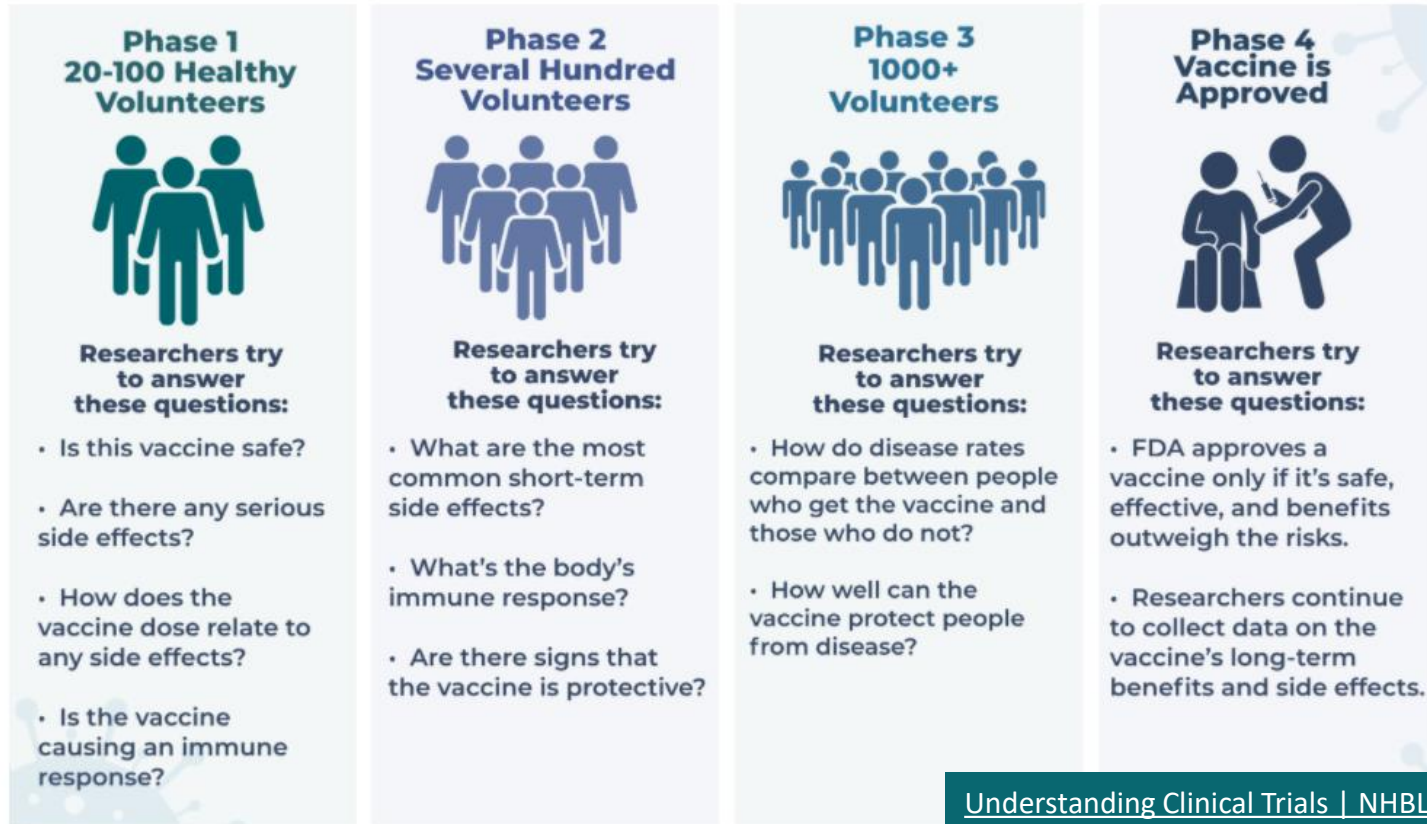


Romelia Navarro is comforted by Michele Younkin, a nurse, while sitting at the bedside of her dying husband. JAE C. HONG / AP - STORY: ED YONG "NO ONE IS LISTENING TO US"



Nurse Janil Wise, left, screens patient Sarah Bodle, who is pregnant and was exposed to a person with COVID-19, in the obstetrics triage tent at Providence Holy Cross Medical Center in Mission Hills. (Brian van der Brug / Los Angeles Times)

Adding new measures for prevention: COVID-19 vaccines



COVID-19 vaccines have received FDA Emergency Use Authorizations (EUAs)

- Two vaccines have received FDA Emergency Use Authorizations (EUAs):
 - **Pfizer/BioNTech (BNT162b2)**: 2 doses given at least 21 days apart
 - **Moderna (mRNA-1273)**: 2 doses given at least 28 days apart
- FDA's Emergency Use Authorization is a process that helps facilitate the availability and use of medicines and vaccines during public health emergencies, such as the current COVID-19 pandemic.
- COVID-19 vaccines are being held to the **same safety standards** as all vaccines.

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

As of December 21, 2020

Pfizer/BioNTech

- **45,302** enrolled
- **150** clinical sites
 - **39** U.S. states

Moderna

- **30,000** enrolled
- **89** clinical sites
 - **32** U.S. states

Source: <https://www.pfizer.com/science/coronavirus/vaccine>; <https://www.modernatx.com/cove-study>

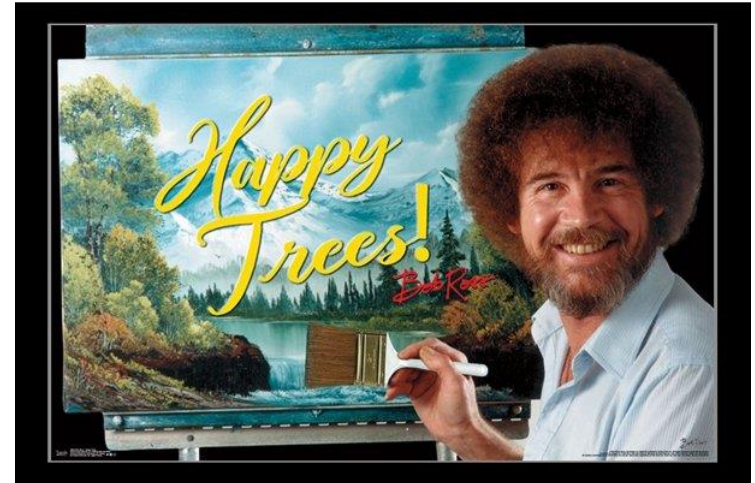
For more information, visit www.clinicaltrials.gov

How COVID-19 mRNA vaccines work

- mRNA vaccines teach our cells how to make a harmless piece of the “spike protein” for SARS-CoV-2.
 - After the protein piece is made, the cell breaks down the instructions (the mRNA) and gets rid of them.
- 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.

About these COVID-19 mRNA vaccines

- Two shots are needed to provide the best protection against COVID-19 for both mRNA vaccines.
 - First shot primes the immune system, helping it recognize the virus.
 - Second shot strengthens the immune response.
- Side effects are commonly seen in these mRNA vaccines, especially after the 2nd dose.
- Side effects may include:
 - fever
 - headache
 - muscle aches



Misinformation

- mRNA vaccines do not use the live virus that causes COVID-19. They **CANNOT** give someone COVID-19.
- mRNA vaccines **DO NOT** affect or interact with our DNA in any way.
- mRNA vaccines are new, but the technology is not. mRNA vaccines have been studied for other infections.
- Fertility
- Safety

Safety of COVID-19 vaccines is a top priority.

- COVID-19 vaccines are being held to the **same safety standards** as all vaccines.



Before authorization

- FDA** carefully reviews all safety data from clinical trials.
- ACIP** reviews all safety data before recommending use.



After vaccine authorization

- FDA** and **CDC** closely monitor vaccine safety and side effects.

Monitoring vaccine safety is a regular, ongoing part of vaccine development.

- **Existing** systems and data sources are used to monitor safety of vaccines after they are authorized or licensed, such as:
 - [Vaccine Adverse Event Reporting System \(VAERS\)](#)
 - [Vaccine Safety Datalink \(VSD\)](#)
 - [Clinical Immunization Safety Assessment \(CISA\)](#)
 - [Biologics Effectiveness and Safety System \(BEST\)](#)
- **New** systems are being developed to monitor vaccine safety, such as [v-safe](#):
 - Active surveillance that uses text messaging to initiate web-based survey monitoring
 - Any clinically important events reported by a participant would be sent to VAERS for follow-up



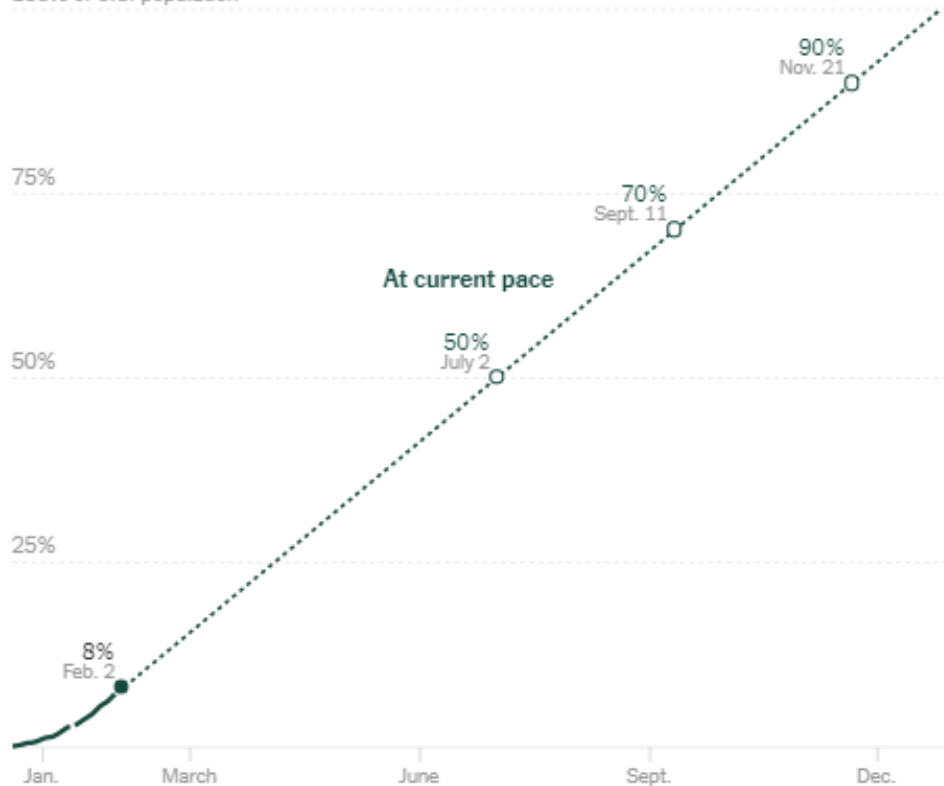
1. The pro-life policy organization (the Charlotte Lozier Institute) said the mRNA vaccines were ethically uncontroversial because of the non-use of fetal cell lines in production.
2. The Catholic Health Association of the US stated, "In terms of the moral principles being concerned about the use of any pharmaceuticals that were developed from aborted fetuses, that is certainly an issue that we all want to be cognizant of and try to avoid their use. With that in mind, the Pfizer and Moderna COVID vaccines that are coming out are not even tainted with that moral problem."
3. The statement from the National Catholics Bioethics Center.
4. The Vatican, the US Conference of Catholic Bishops, and other conservative pro-life groups have noted that these vaccines are ethical when there are no ethically derived alternatives, and in the midst of a global pandemic.
5. From a conservative Southern Baptist standpoint, Dr. Russell Moore, President of the Southern Baptist Convention's Ethics and Religious Liberty Commission, met with Dr. Francis Collins, Director of the US NIH and a deeply devout Christian, to discuss the moral implications of vaccines and fetal cell lines.
6. Discussion from the Gospel Coalition.
7. Christian Medical and Dental Association's statement on ethical vaccines.

Share of population at least partially vaccinated

Based on average daily increase in first doses administered over the past week.

Avg. daily first doses: 934,086

100% of U.S. population



Source: Centers for Disease Control and Prevention | Note: Data from Dec. 20 to Jan. 12 are for all doses administered. Data for Jan. 13 is unavailable. Projections could change if additional vaccines are authorized.

Genomic epidemiology of novel coronavirus (hCoV-19)

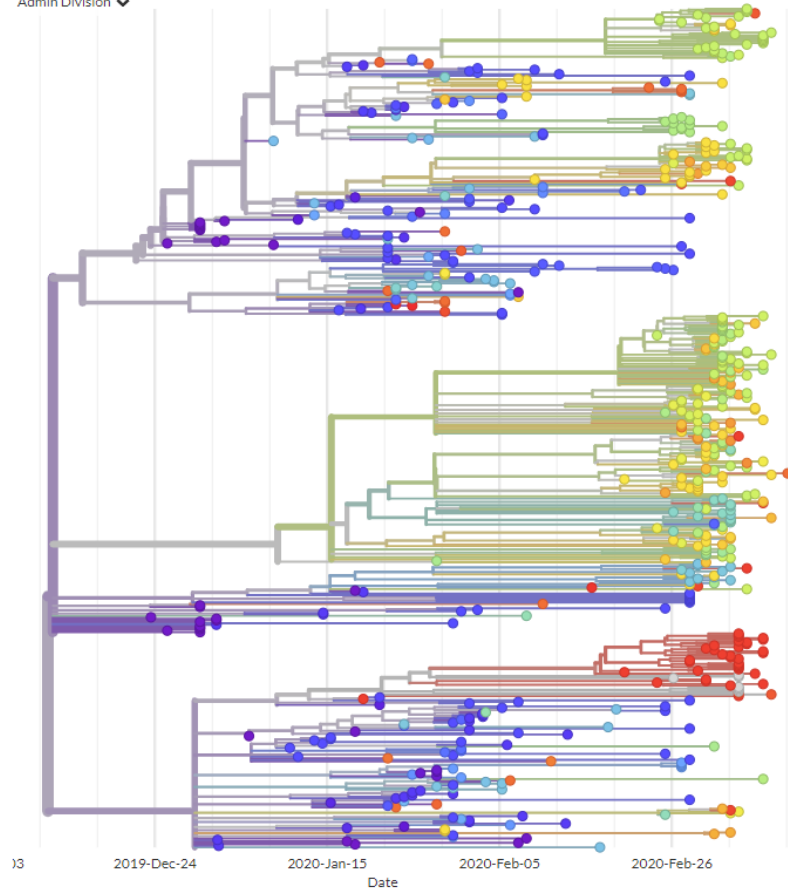
Built with [nextstrain/hcov](#) using data from [GISAID](#).

Showing 566 of 566 genomes sampled between Dec 2019 and Mar 2020.

Phylogeny

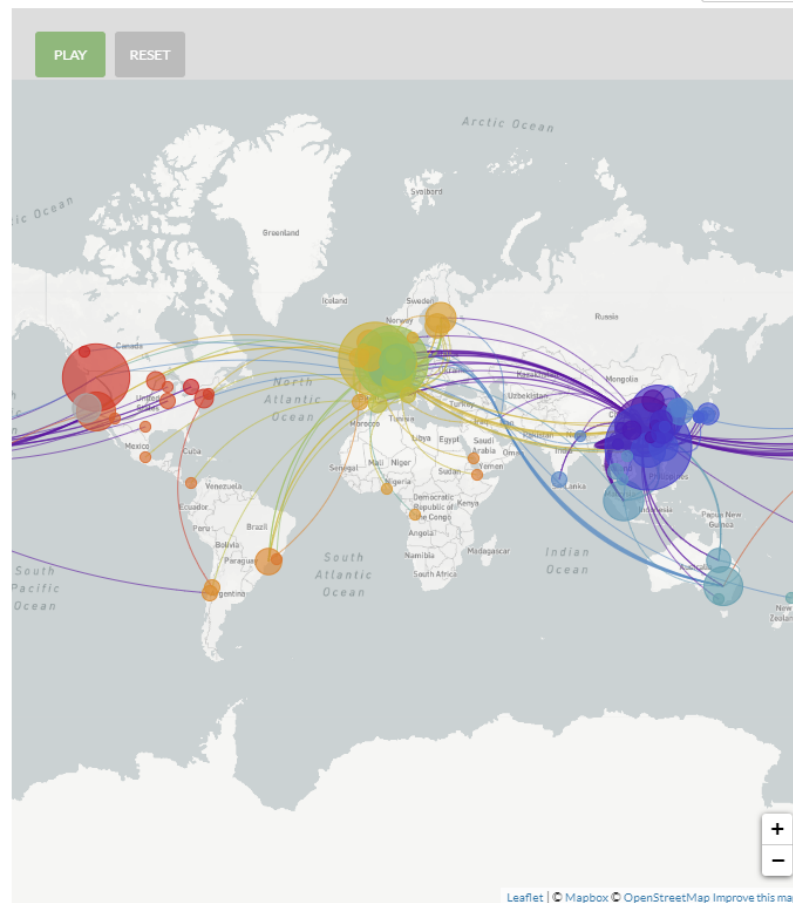
Admin Division ▼

RESET LAYOUT



Transmissions

RESET ZOOM





COVID RISK LEVEL: **GREEN**

LESS THAN ONE CASE PER 100,000 PEOPLE

ON TRACK FOR CONTAINMENT

MONITOR WITH VIRAL TESTING AND
CONTACT TRACING PROGRAM

#THEPATHTOZERO

COVID RISK LEVEL: **YELLOW**

1-9 CASES PER 100,000 PEOPLE

COMMUNITY SPREAD

RIGOROUS TEST AND TRACE
PROGRAMS ADVISED

#THEPATHTOZERO

COVID RISK LEVEL: **ORANGE**

10-24 CASES PER 100,000 PEOPLE

ACCELERATED SPREAD

STAY-AT-HOME ORDERS AND/OR RIGOROUS
TEST AND TRACE PROGRAMS ADVISED

#THEPATHTOZERO

COVID RISK LEVEL: **RED**

25+ CASES PER 100,000 PEOPLE

TIPPING POINT

STAY-AT-HOME ORDERS NECESSARY

#THEPATHTOZERO

faith

FEAR

You, my brothers and sisters, were called to be free. But do not use your freedom to indulge the flesh; rather, serve one another humbly in love.

GALATIANS 5:13

#FINDFREEDOMINCHRIST
THECOVE.ORG

BUT YOU ARE
a *chosen* PEOPLE,
a *royal* PRIESTHOOD,
a *holy* NATION,
God's *special* POSSESSION,

THAT YOU MAY
DECLARE the *praises*
of Him who called you
out of darkness into
His *wonderful light*.

1 Peter 2:9

What if
Christians
led the way
out of this?

Learn more!

CDC Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

Search COVID-19 [Advanced Search](#)

Coronavirus Disease 2019 (COVID-19)

[Your Health](#) [Community, Work & School](#) [Healthcare Workers & Labs](#) [Health Depts](#) [Cases & Data](#) [More](#)

Your Health

Things You Need to Know

Symptoms

Testing

Vaccines

8 Things to Know

About COVID-19 Vaccines

Facts about COVID-19 Vaccines

How CDC is Making Vaccine Recommendations

Ensuring the Safety of Vaccines

Ensuring COVID-19 Vaccines W

YOUR HEALTH

Vaccines

Updated Nov. 20, 2020 [Languages](#) [Print](#)

Safety Is a Top Priority
The U.S. vaccine safety system ensures that all vaccines are as safe as possible. [Learn more.](#)

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/index.html>