

COVID-19 AND PEOPLE WITH IDD: ENVIRONMENTAL PROACTIVENESS, VACCINES AND OTHER CONSIDERATIONS

MAGGIE PAYNE RN, MN, PNP-BC

EMORY UNIVERSITY FACULTY MEMBER

DNP STUDENT

CEO OF DAHLONEGA PEDIATRICS



INTRODUCTION



ZOOM MEETING

Audio Only

With Video



COVID-19 AND TDD



OBJECTIVES

TITLE: REDUCING FEELINGS OF UNPREPAREDNESS EXPERIENCED BY NURSES ASSIGNED THE CARE OF COVID-19 POSITIVE INDIVIDUALS WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES (IDD).

OBJECTIVE 1:

IDENTIFICATION AND DISCUSSION OF OUTCOMES OF THE CONVERGENCE OF HISTORICAL AND CURRENT DYNAMICS FACED BY INDIVIDUALS WITH IDD THAT RESULT IN HEIGHTENED VULNERABILITY DURING THE COVID-19 HEALTH CRISIS

OBJECTIVE 2:

NURSING STRATEGIES (OLD AND NEW) INTENDED TO MITIGATE HEALTH DECLINE IN THE MIDST OF COVID

OBJECTIVE 3:

LEARNING SELF-EFFICACY; THE APPLICATION OF NURSING STRATEGIES WHEN OTHER THREATS TO THE HEALTH OF INDIVIDUALS WITH IDD ARE IDENTIFIED

TOPIC SUMMARY

1. HOW DID WE GET HERE?

2. WHAT CAN WE DO ABOUT IT?

VACCINE HESITANCY AND VACCINE DEVELOPMENT AND SAFETY

3. WHAT CAN WE DO ABOUT IT AFTER THE FACT?

ENVIRONMENTAL MEASURES

TESTING, CARE & TREATMENT

TOPIC ONE



HOW DID WE GET HERE?



SO, THEY SAID WE WERE GOING TO HAVE A PANDEMIC



PANINI TIME-LINE

Dec. 31, 2019



China alerts World Health Organization (WHO) to several cases of pneumonia with no known cause in Wuhan. The disease goes on to be named COVID-19.

Jan. 7



WHO officials announce they have identified a new virus named SARS-CoV-2 that causes COVID-19. It belongs to the coronavirus family, which includes viruses that cause SARS, MERS and the common cold.

Jan. 11



China announces the first death linked to COVID-19.

Jan. 13



WHO reports the first case outside of China in Thailand.

Feb. 26



National Institutes of Health (NIH) begin the first clinical trial in the U.S. for a potential COVID-19 treatment, remdesivir, an antiviral drug originally developed to treat Ebola.

Feb. 29



The FDA took steps to expand novel coronavirus testing to hospital clinical microbiology laboratories.

Mar. 11



WHO declares COVID-19 a pandemic, with more than 100,000 cases and 4,000 deaths in 114 countries.

Apr. 2



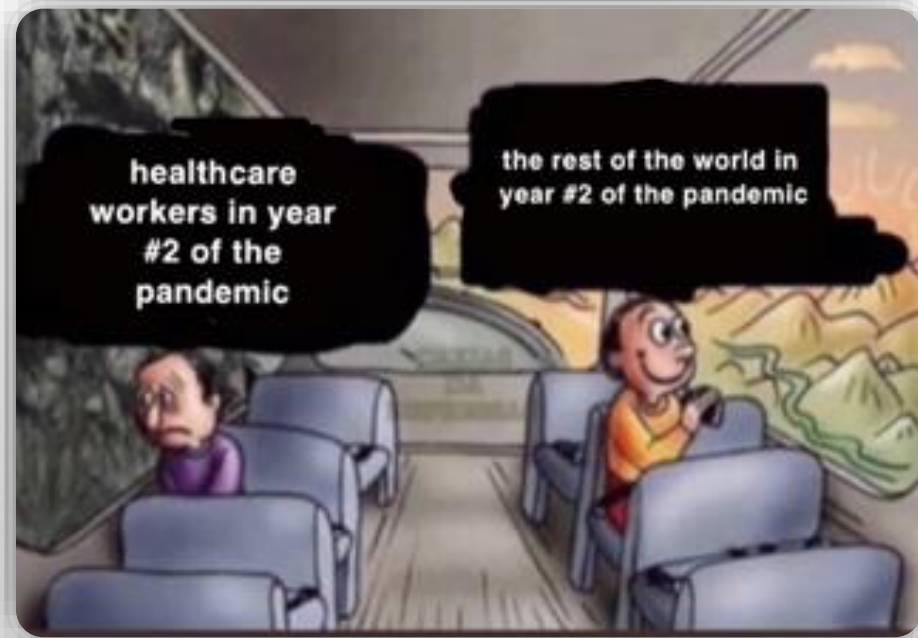
Confirmed cases of COVID-19 top 1 million worldwide.

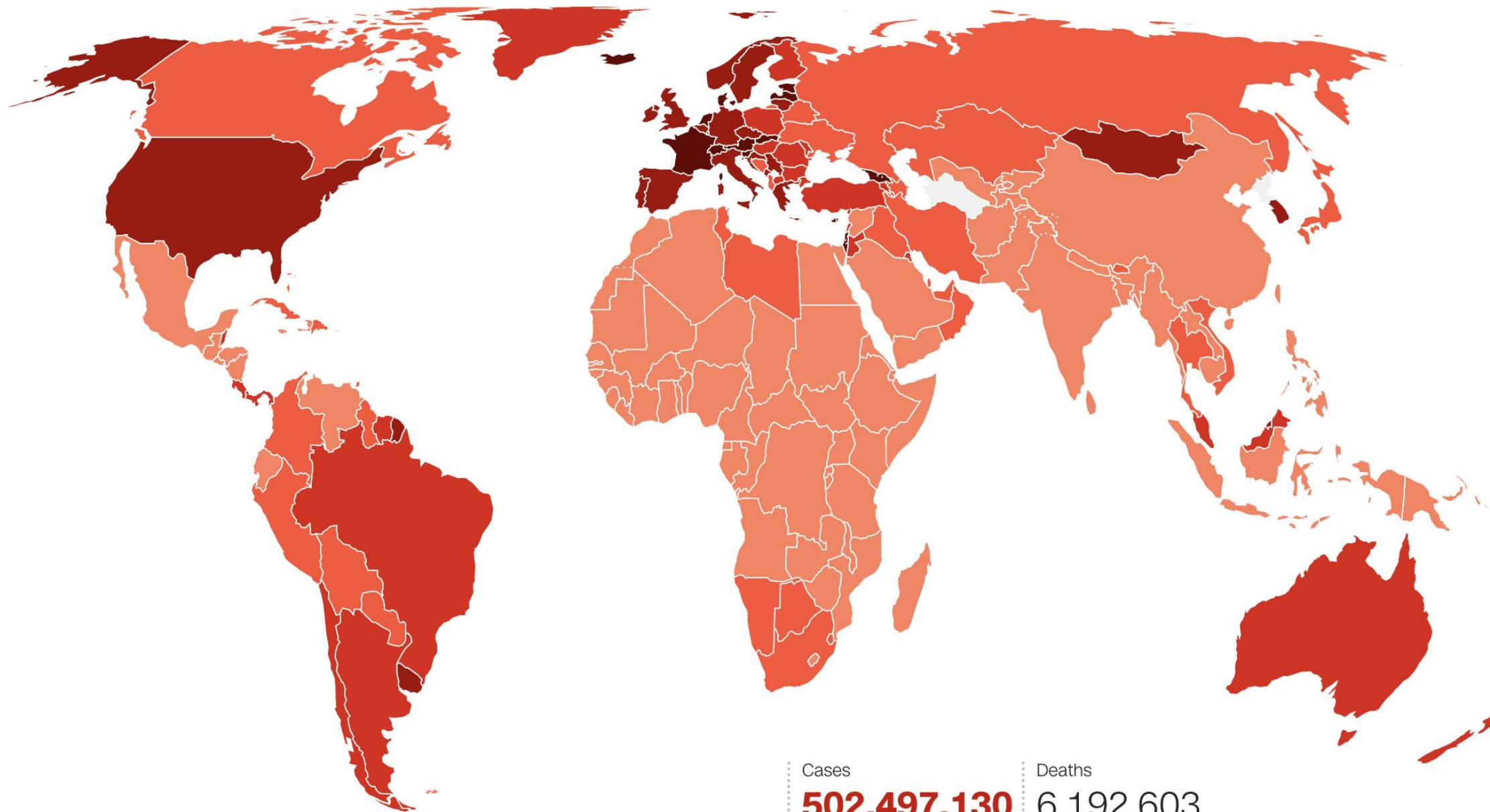
Apr. 10



Global deaths due to COVID-19 top 100,000.

PANDEMIC IN NUMBERS: CURRENT STATS



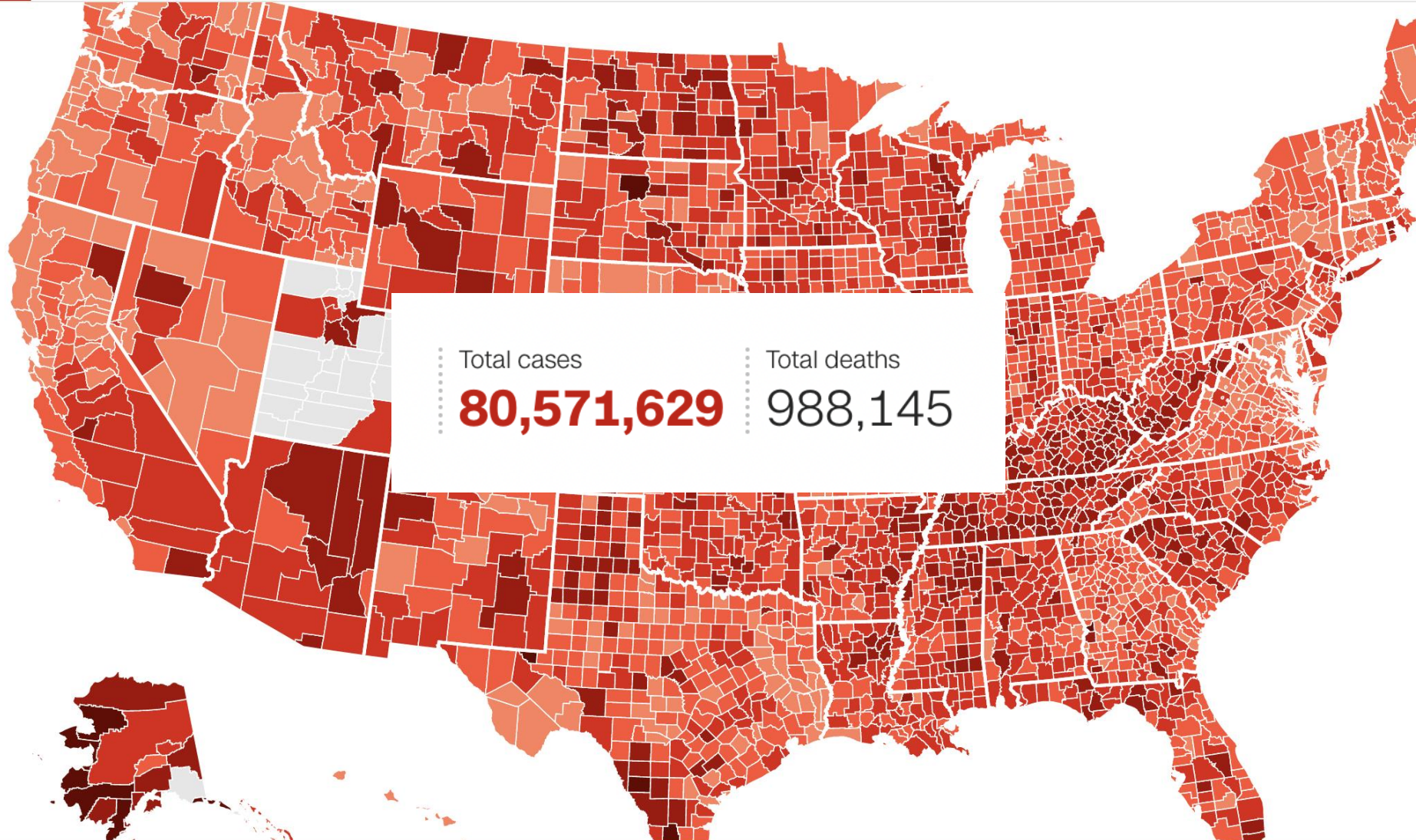


Cases

502,497,130

Deaths

6,192,603



Including results for [united states population percentage of world population](#)

Search only for [us population percent of world population](#)

United States › Population

326.7 million



the United States population is equivalent to 4.25% of the total world population. the U.S.A. ranks number 3 in the list of countries (and dependencies) by population. The population density in the United States is 36 per Km² (94 people per mi²).

srv1.worldometers.info/world-population/us-population/

[United States Population \(2022\) - Worldometer](#)

YOU DO THE MATH...

$$F = G \frac{m_1 m_2}{d^2}$$

$$\phi(x) = \frac{1}{\sqrt{2\pi\sigma}} e^{-\frac{(x-\mu)^2}{2\sigma^2}}$$

$$F - E + V = 2$$

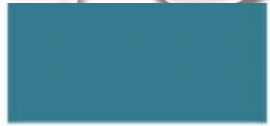
$$i\hbar \frac{\partial}{\partial t} \psi = \hat{H} \psi$$

$$E = mc^2$$

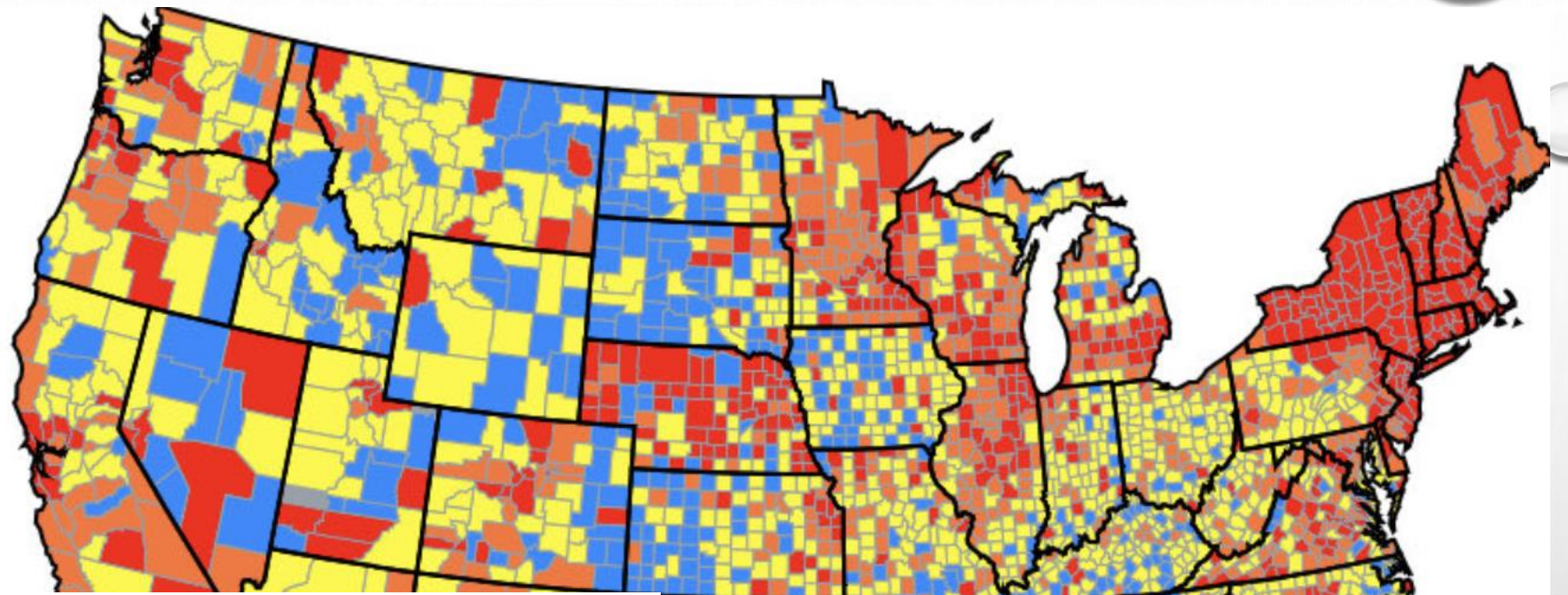
$$ds \geq 0$$

.0425 X 6192603 = 263,185

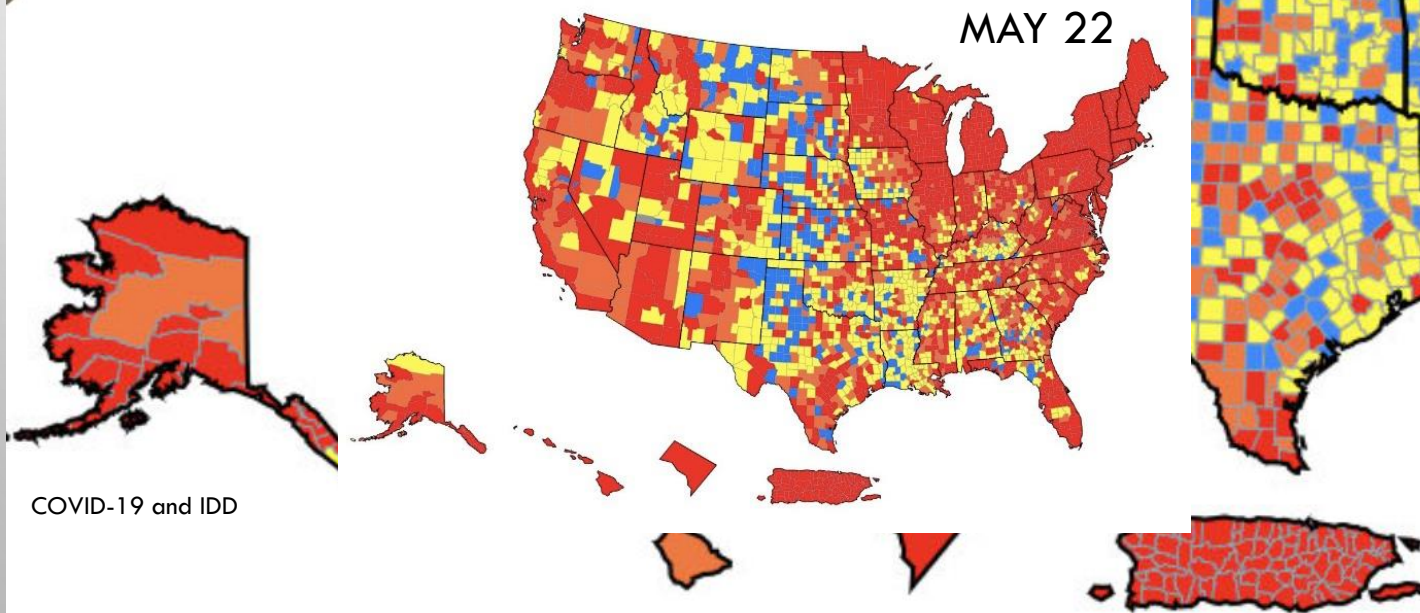
$$\frac{df}{dt} = \lim_{h \rightarrow 0} \frac{f(t+h) - f(t)}{h}$$

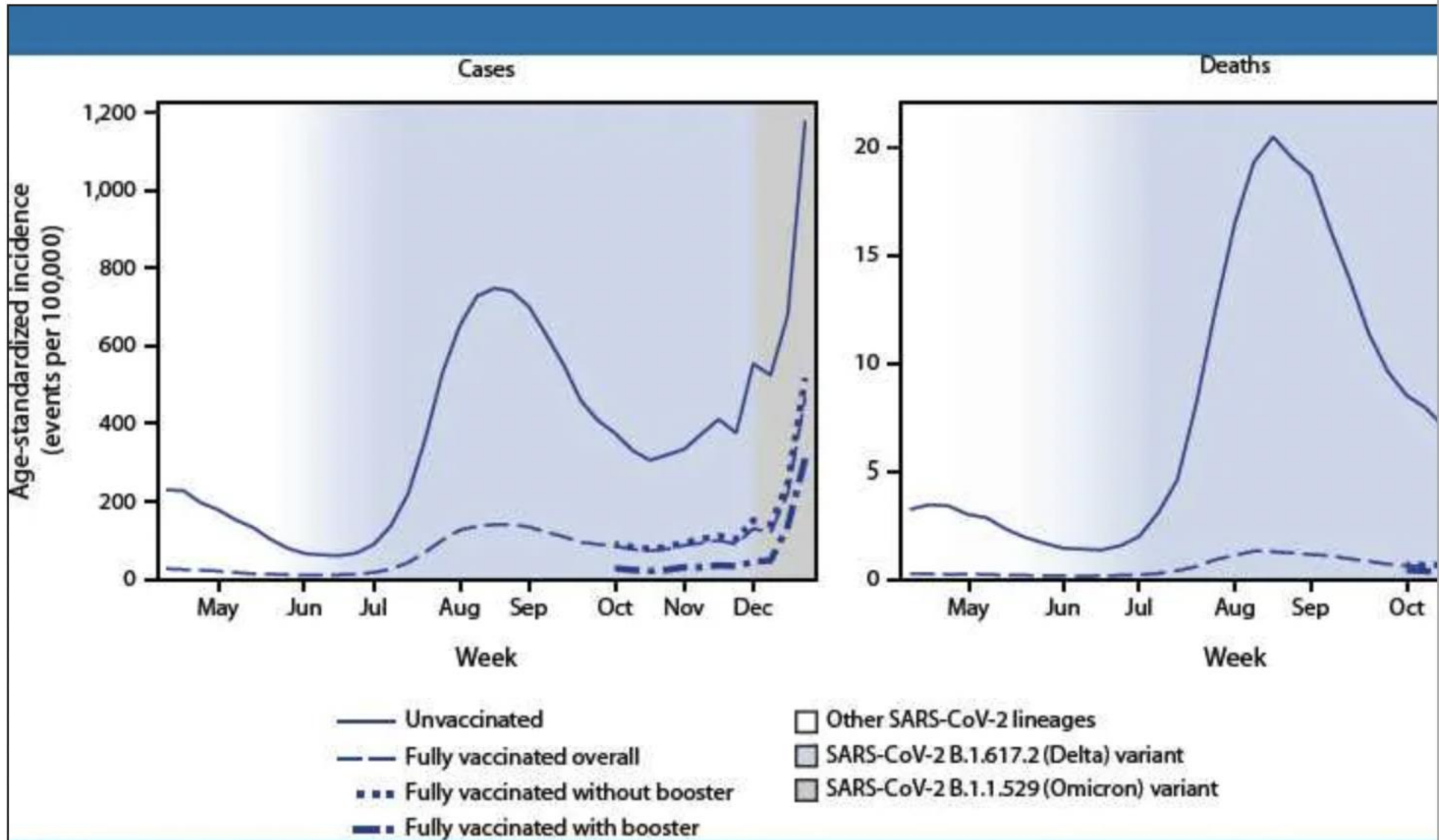


April
2022



MAY 22







POLL 1: HOW SAFE IS THE COVID-19 VACCINE?

- A. VERY SAFE
- B. SOMEWHAT SAFE
- C. NOT SAFE AT ALL
- D. NOT SURE

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VACCINE HESITANCY, DEVELOPMENT AND SAFETY

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ENVIRONMENTAL MEASURES

TESTING, CARE & TREATMENT

TOPIC TWO



**WHAT CAN WE DO ABOUT IT?
VACCINES AND WHY ISN'T EVERYBODY
AS EXCITED AS MAGGIE IS ABOUT THEM?**



VACCINE HESITANCY



*ROOT CAUSES OF VACCINE
HESITANCY*



NURSES AND VACCINE HESITANCY

VACCINES CRUCIAL LIFESAVING PUBLIC HEALTH MEASURE

- CDC: VACCINES ARE A GLOBAL SUCCESS STORY
- ESTIMATE VACCINES SAVE 2-3 MILLION LIVES EACH YEAR (HILL)

VACCINE HESITANCY PERVASIVE HEALTHCARE PROBLEM

- WHO VACCINE HESITANCY IS ONE OF THE TOP TEN THREATS TO GLOBAL HEALTH

NURSES REPORT VARYING DEGREES OF UNDERSTANDING RE: COVID-19 VACCINE

TWO STUDIES:

- NURSES NOTED TO HAVE A GREATER LEVEL OF VACCINE DOUBT WHEN COMPARED TO OTHER HEALTHCARE WORKERS
- ONLY 34% UNVACCINATED NURSES PLANNED TO RECEIVE THE VACCINE “ASAP”

**ANA SURVEY 88% OF 4000 NURSES
PLANNED TO RECEIVE COVID-19
VACCINE**



BOTTOM LINE: MOST NURSES BELIEVE IN COVID-19 VACCINE





**VACCINE HESITANCY IS A GLOBAL
PROBLEM**



REASONS FOR VAX HESITANCY VARY WIDELY

VAX HESITANT HOLD A SPECTRUM OF VACCINE BELIEFS

BEHAVIORS RANGE FROM:
REFUSING ALL VACCINES TO
REFUSING SOME VACCINES TO
CHOOSING AN "ALTERNATIVE
SCHEDULE"

SALMON (2015) & OTHERS

VACCINE ACCEPTANCE VARIES ACROSS THE GLOBE

90% ACCEPTANCE

- ECUADOR
- MALAYSIA
- INDONESIA
- CHINA

CONTRASTED WITH

- KUWAIT 23%
- JORDAN 28%
- RUSSIA 54%
- FRANCE 58%
- US 50-60%
- (SOME OF THE LOWEST IN THE WORLD)

MIS AND DIS INFORMATION



COVID STATES PROJECT: CHANGES OVER TIME

- INTERVIEWED PPL 4 POPULAR VAX MISINFORMATION CLAIMS
- MISPERCEPTIONS: HIGHEST PPL AGE 25-44 WITH MINOR CHILDREN, NOT COLLEGE EDUCATED AND REPUBLICANS
- 1/3 WHO BELIEVE MISINFORMATION: KNOW THAT SCIENTIFIC AND MEDICAL EXPERTS REJECT THE FALSE CLAIMS
- 48% PPL WHO THINK THEY KNOW ABOUT COVID VACCINES MORE LIKELY TO BELIEVE FALSE CLAIMS



10 6 5

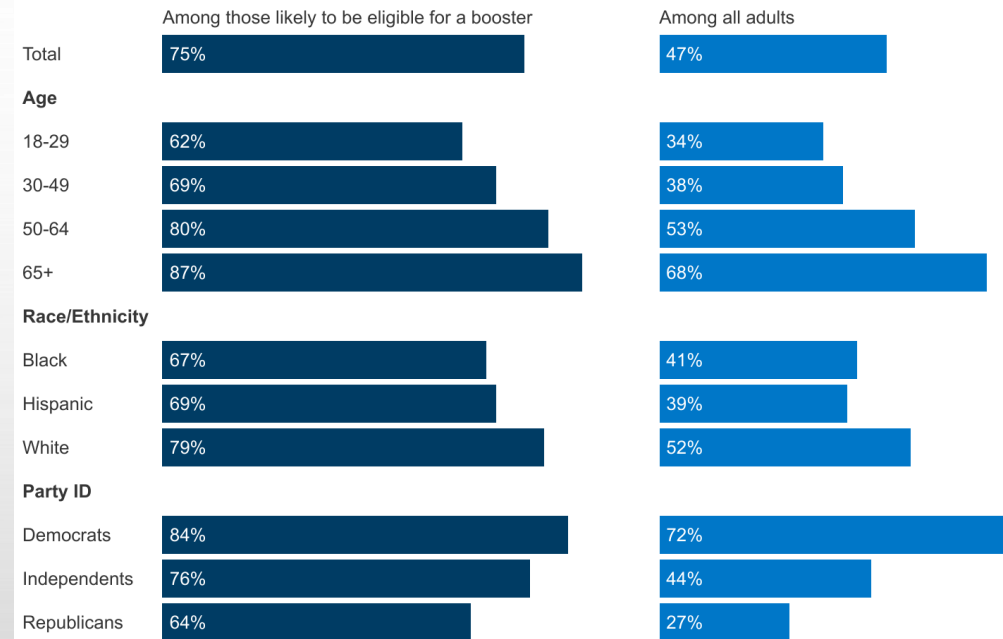
CAUSES OF VAX HESITANCY: GROUPS WITHOUT BOOSTERS



MOST ELIGIBLE FOR BOOSTER HAVE GOTTEN IT

- EXCEPT FOR :
- YOUNGER ADULTS
- BLACK ADULTS
- REPUBLICANS

Percent who report getting a COVID-19 booster shot:



NOTE: Receiving a booster dose defined as receiving at least 3 shots or at least 2 shots if one was Johnson & Johnson. Likely to be eligible for a booster defined as having received a booster or completing full initial course of vaccination 6 months ago or longer. See topline for full question wording.

SOURCE: KFF COVID-19 Vaccine Monitor (February 9-21, 2022)

**KFF COVID-19
Vaccine Monitor**

CAUSES OF VAX HESITANCY: MIS AND DISINFORMATION

INFODEMIC - UNICEF

MISINFORMATION VS DISINFORMATION

**Both contribute to lower
vaccine confidence and lower vaccine
rates!**

- DIS: FALSE INFORMATION
CREATED & SPREAD WITH
MALICIOUS INTENT

The Original #1 Mad Libs

MAD LIBS

World's Greatest Word Game



A super silly way to fill in the _____!

PLURAL NOUN

- “IT'S ALMOST LIKE CONSPIRACY THEORY MAD LIBS. THEY JUST INSERTED THE NEW CLAIMS,” SAID JOHN GREGORY, DEPUTY HEALTH EDITOR AT NEWSGUARD”

COVID-19 AND IDD

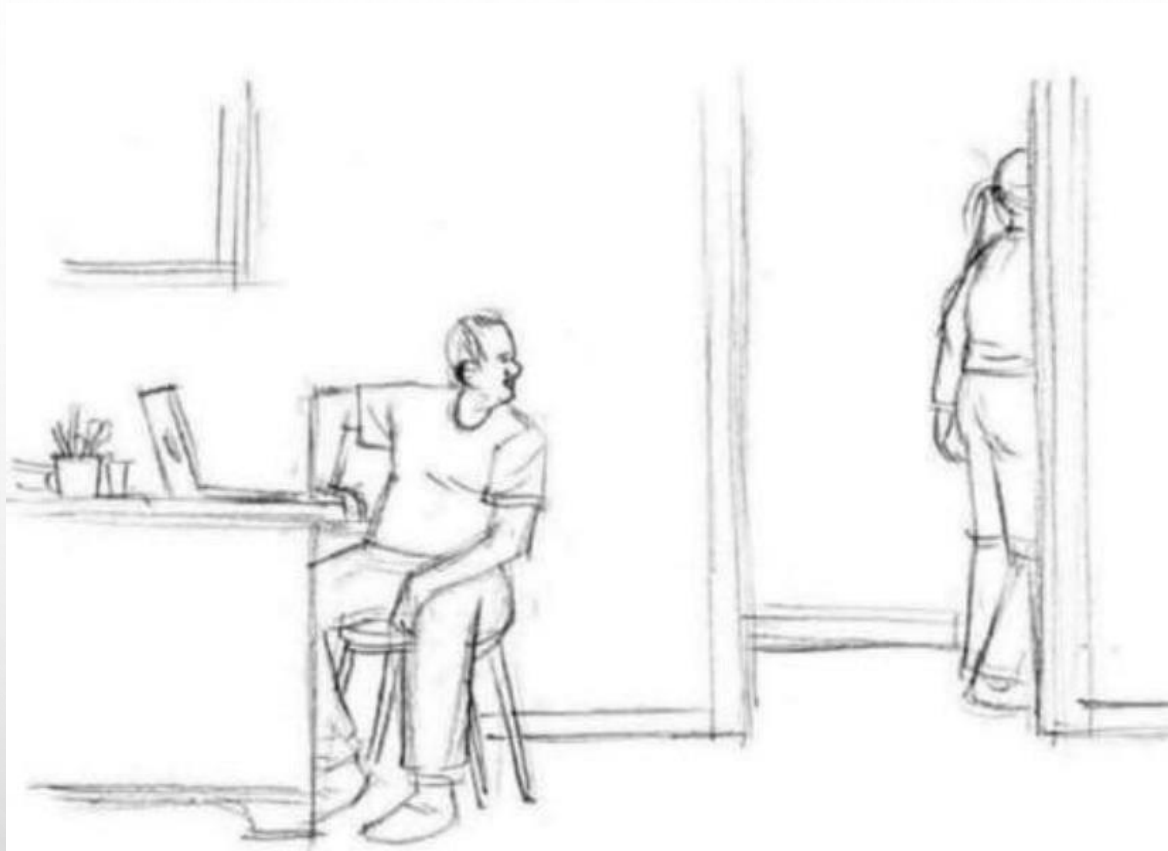
30

JUST 12 SOURCES FOR 65% OF THE DISINFORMATION

The Dozen misinformation "superspreaders" are:

1. Joseph Mercola
2. Robert F. Kennedy, Jr.
3. Ty and Charlene Bollinger
4. Sherri Tenpenny
5. Rizza Islam
6. Rashid Buttar
7. Erin Elizabeth
8. Sayer Ji
9. Kelly Brogan
10. Christiane Northrup
11. Ben Tapper
12. Kevin Jenkins





*“Honey, come look! I’ve found some information all
the world’s top scientists and doctors missed.”*

POLL 1: HOW SAFE IS THE COVID-19 VACCINE? YOUR ANSWERS



VACCINE DEVELOPMENT

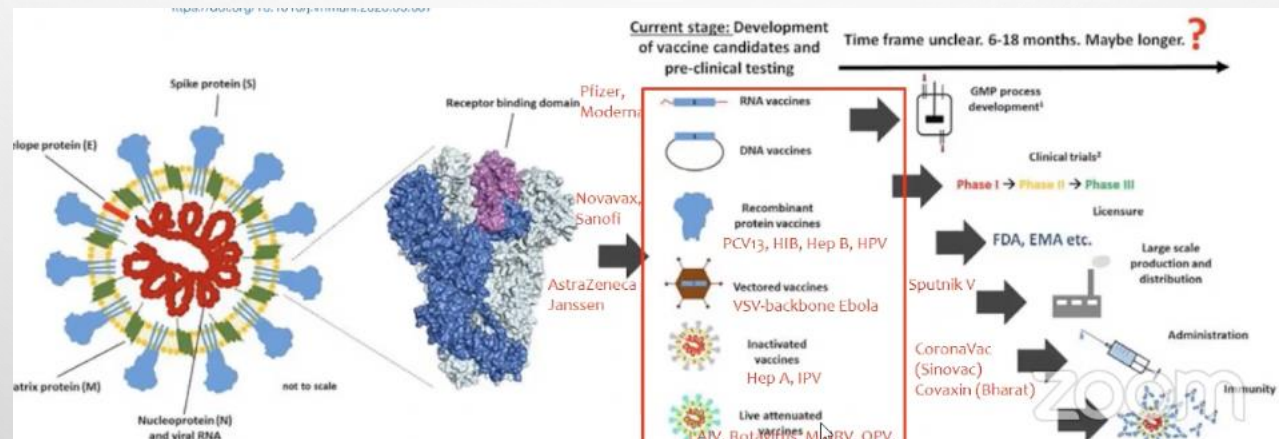


VACCINE DEVELOPMENT AND
SAFETY



VACCINE DEVELOPMENT

- LIVE ATTENUATED, VECTOR, CONJUGATE, RECOMBINANT, RNA NEW CLASS OF VACCINES



MRNA

APPROACH IS:

- ENCODED MRNA FOR SPIKE PROTEIN

ENCAPSULATED IN A LIPID NANO PARTICLE INJECTED

LIPID NANO PARTICLE HAS AN AFFINITY FOR THE CELL SO IF FUSES WITH THE CELL AND RELEASES MRNA INTO THE CELL

TRANSCRIBED...

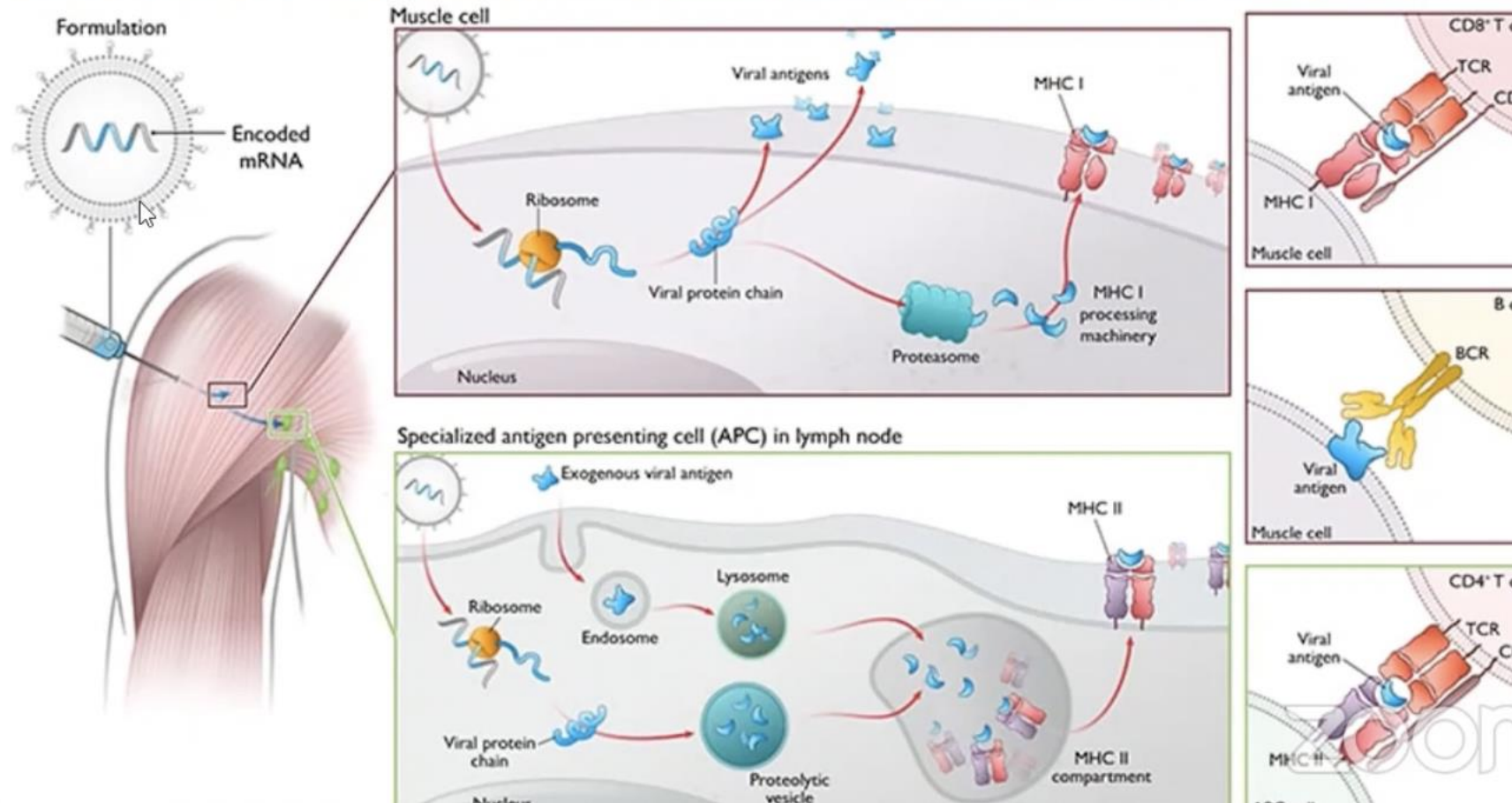
- MRNA IS TRANSCRIBED BY A RIBOSOME
- SIMILAR TO ANY MRNA YOUR CELLS MAKE REGULARLY
- THAT RESULTS IN PRODUCTION OF AN ANTIGEN WHICH IS TAKEN UP BY T CELLS
- THESE LIPID NANO PARTICLES MAY ALSO BE TAKEN UP VIA OTHER IMMUNOGENIC PATHWAYS

SIMILAR TO VECTOR VAX

- MRNA VACCINES SIMILAR TO VIRAL VECTOR VACCINES
- VECTOR VACCINE: JUST USING THE VIRAL VECTOR TO CARRY THE SPIKE PROTEIN TO GENERATE AN IMMUNE RESPONSE

mRNA Vaccine Approach

Closely mimics a native viral infection leading to B and T cell



COVID-19 AND TDD



**POLL 2: SHOULD FOLKS WITH IDD
RECEIVE THE COVID-19 VACCINE?**

YES

NO

I AM NOT SURE

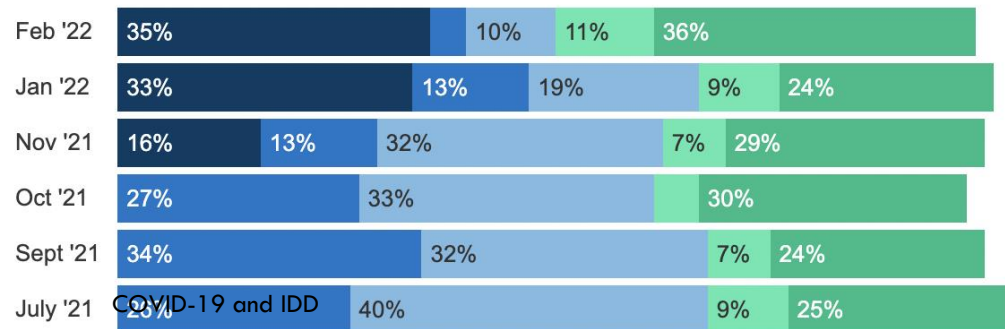
IF YOU THOUGHT IT WAS HARD TO CONVINCING THEM TO VACCINATE THE OVER 5 AGE GROUP...

KFF: <https://www.kff.org/coronavirus-covid-19/dashboard/kff-covid-19-vaccine-monitor-dashboard/>

About A Third Of Parents Of Kids Ages 5-11 Say Their Child Has Gotten Vaccinated, But A Similar Share Say They Will "Definitely Not"

Thinking about your child between the ages of 5 and 11, have they received at least one dose of a COVID-19 vaccine, or not? If not, do you think you will get them vaccinated...?

■ Child is vaccinated
■ Right away
■ Wait and see
■ Only if required
■ Definitely not



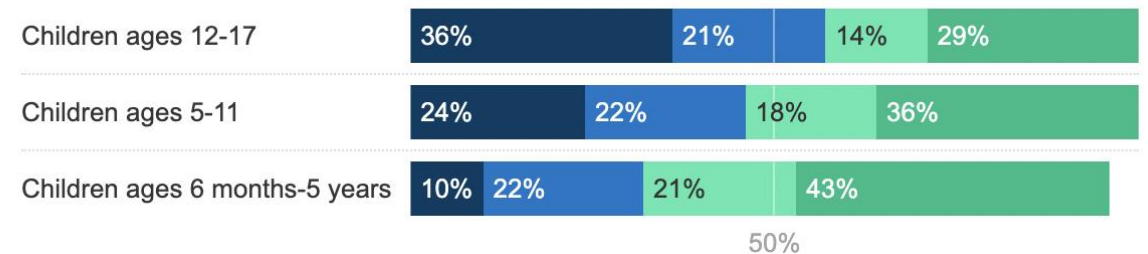
NOTE: Among parents or guardians of children between the ages of 5 and 11. Jul.-Oct. 2021 question wording: "Once there is a COVID-19 vaccine authorized and available for your child, how likely are you to get your child vaccinated?"

KFF COVID-19

Majority Of Parents Are Not Confident The COVID-19 Vaccines Are Safe For Children Under Age 5

How confident, if at all, are you that the COVID-19 vaccines are safe for...?

■ Very confident
■ Somewhat confident
■ Not too confident
■ Not at all confident



NOTE: Among parents or guardians of children under 18. See topline for full question wording.

SOURCE: KFF COVID-19 Vaccine Monitor (February 9-21, 2021) • Download PNG

KFF COVID-19 Vaccine Monitor

TEXAS RECOMBINANT VACCINE





HOTEZ, BOTTAZZI AND CORBEVAX

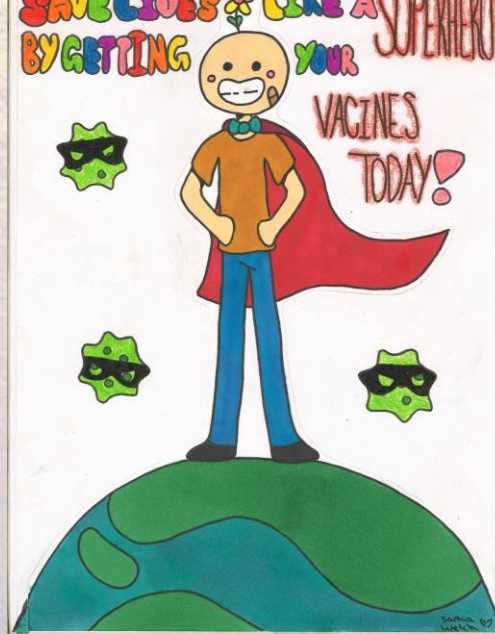


“WE WERE SO FIXATED ON INNOVATION THAT NOBODY THOUGHT, HEY MAYBE WE COULD USE A LOW-COST, DURABLE, EASY-BREEZY VACCINE THAT CAN VACCINATE THE WHOLE WORLD”





Up Next...



- Moderna's bivalent booster

Superior neutralizing titers compared to MRN-1273 against all variants, including Omicron

Superiority continued 6 months after vaccination

VACCINE MYTH AND FACTS

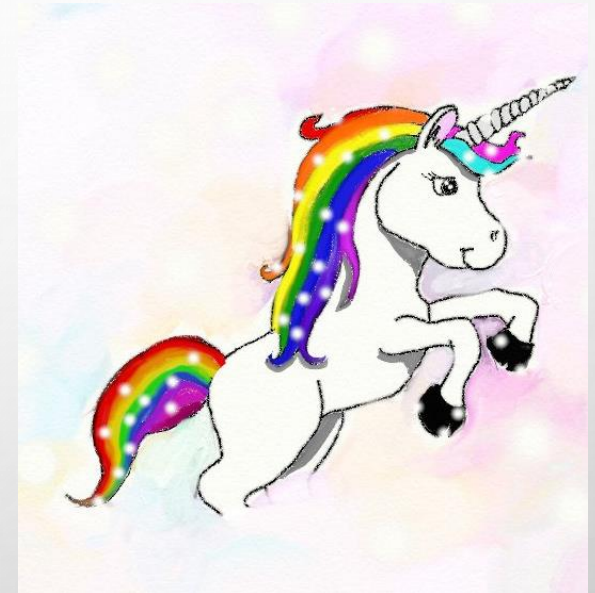


VACCINE FACTS AND MYTHS





NOW FOR THE MYTHS



[This Photo](#) by Unknown Author is licensed under [CC BY-NC-ND](#)

MYTH NUMBER ONE – TOO FAST!!!



SO IT WAS TOO FAST, RIGHT?

R&D, PHASE I CLINICAL TRIALS

- TYPICAL 8 MONTH PROCESS ACCELERATED BY:
 - CREATING VAX CANDIDATES IMMEDIATELY AFTER VIRAL GENOME SEQUENCE IS AVAILABLE
 - USING VACCINE PLATFORMS DEVELOPED FOR OTHER DISEASES
- 42 MONTH PROCESS ACCELERATED BY:
 - LARGE SCALE PHASE III CLINICAL TRIALS, 30,000 VOLUNTEERS, RAPID COLLECTION & ANALYSIS FOR SAFETY AND EFFICACY OF DEMOGRAPHICALLY DIVERS POPULATIONS BY THE FDA
 - US GOVT PROMISED FUNDING (AT RISK) OF LARGE SCALE MANUFACTURE OF MOST PROMISING CANDIDATES

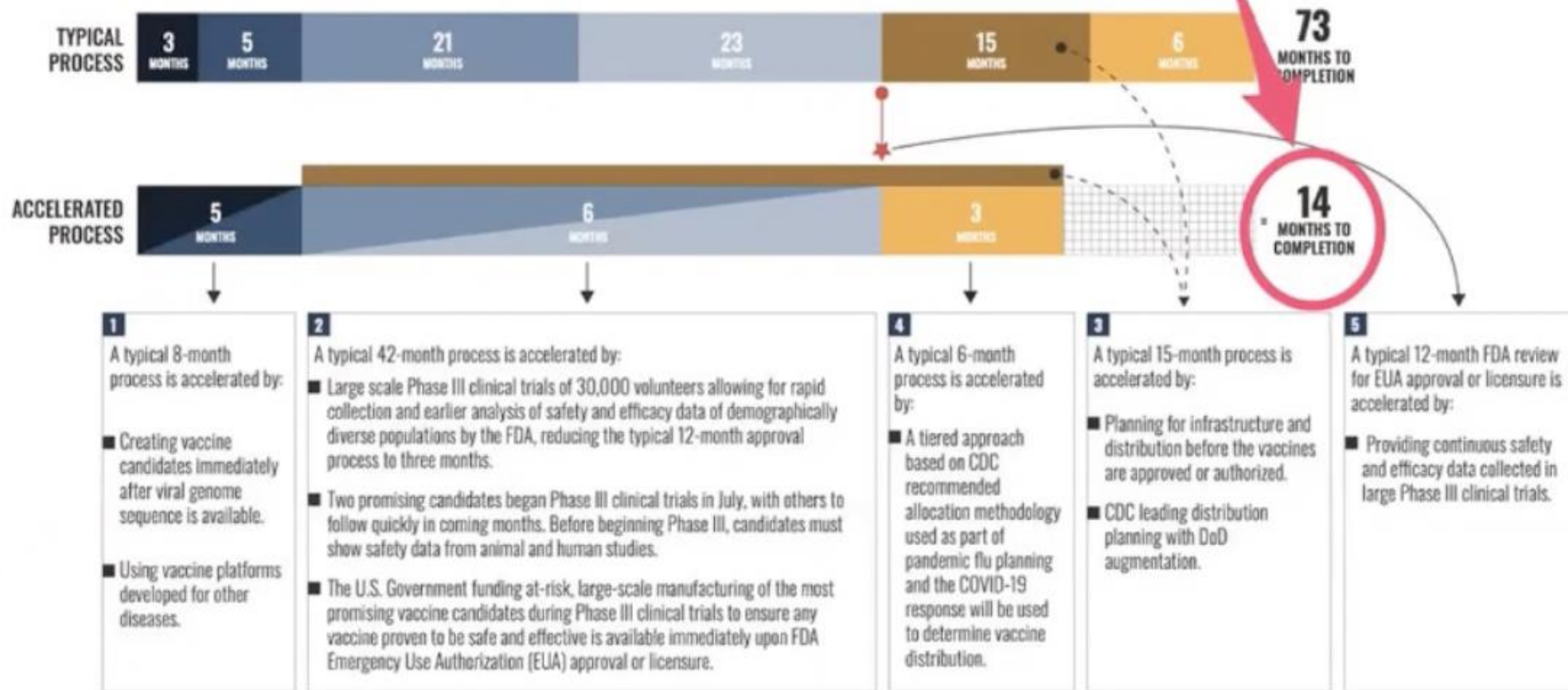
MANUFACTURING, DISTRIBUTION

- MANUFACTURING: TYPICAL 6-MONTH PROCESS IN ACCELERATED BY:
- DISTRIBUTION:
 - PLANNING FOR INFRASTRUCTURE & DISTRIBUTION BEFORE THE VACCINES ARE APPROVED OR AUTHORIZED
 - CDC LEADING DISTRIBUTION PLANNING
- FDA APPROVAL/LICENSURE IS ACCELERATED BY:
 - PROVIDING CONTINUOUS SAFETY AND EFFICACY DATA COLLECTED IN LARGE PHASE III CLINICAL TRIALS



OPERATION WARP SPEED ACCELERATED VACCINE PROCESS

MISSION: Deliver 300 million doses of safe and effective vaccine by 1 January 2021.



R&D + Preclinical Trials Vaccine Candidate/s Identified
 Phase I Clinical Trials
 Phase II Clinical Trials
 Phase III Clinical Trials
 Manufacturing
 Distribution

MYTH NUMBER TWO – NOT SAFE, NOT EFFECTIVE, TOO RISKY



VACCINE FACTS



DEVELOPMENT

WHAT'S AVAILABLE

THE TRUTH ABOUT RISKS



PORMOHAMMAD, ET AL., META-ANALYSIS OF RCT'S COVID VACCINE

Table 2

Efficacy of adenovirus-based and mRNA-based COVID-19 vaccines.

Vaccine Type	RCT Phase	Number Studies	Efficacy (%)	95% CI (%)		Included Case N	Heterogeneity Test, <i>p</i> -Value
				Lower Limit	Upper Limit		
Adenovirus-based	2/3	4	80.2	0.564	0.927	20771	<0.001
mRNA-based	2/3	2	94.6	0.936	0.954	34041	<0.001

[Open in a separate window](#)

RCT = randomized control trial.

PORMOHAMMAD, ET AL. 2021

SIDE EFFECTS

- MRNA VAX HIGHEST LEVEL SE
- INJECTION SITE PAIN, FEVER, REDNESS, SWELLING, INDURATION, PRURITUS, CHILLS, MYALGIA, ARTHRALGIA, VOMITING, FATIGUE, AND HEADACHE
- OF LATE, TINNITUS WITH PFIZER (OLDER WOMEN, NOT SURE IF FROM THE VACCINE)
- VACCINE LEAVES YOUR SYSTEM BY 2 WEEKS

ADVERSE EFFECTS

- FEW EXPERIENCED
- MOST COMMON ANAPHYLAXIS (LATEST INFO) 5/1 MILLION
- BLOOD CLOTS – MOST COMMON WITH J AND J AND ASTRAZENECCA
 - RARE AFTER J AND J 60/18.6 MILLION
 - MOST AT RISK WOMEN 30-49
 - 4 TTS MRNA VAX OUT OF 544 MILLION ADMIN

GUILLAIN-BARRE SYNDROME (GBS) RARE AND MOSTLY WITH J AND J

J and J – 313/
18.6 million

Usually 2 weeks
after vaccine

Usually 50 and
over

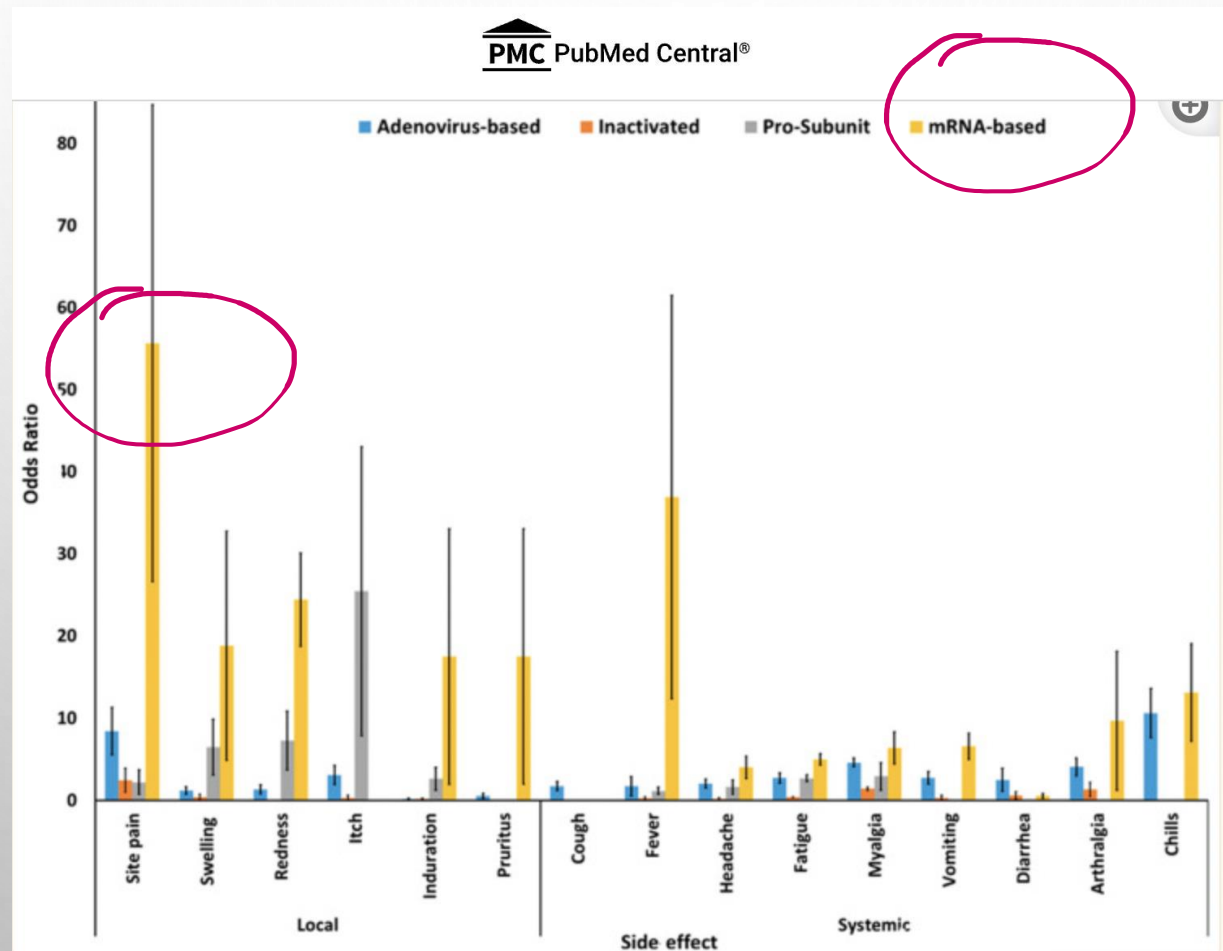
After 21 days
GBS 21 times
higher than
mRNA vaccines

After 42 days 11
times higher than
mRNA vaccines

DEATHS: CDC 4/17/22

- MILLIONS OF US CITIZENS RECEIVED, MOST INTENSIVE SAFETY MONITORING IN HISTORY
- 9 CONFIRMED DEATHS ATTRIBUTED TO TTS FOLLOWING J AND J COVID-19
- WOMEN 30-49 SHOULD BE AWARE OF THIS RISK WITH J AND J

MRNA VACCINES: LESS ADVERSE RISK, MORE SIDE EFFECTS

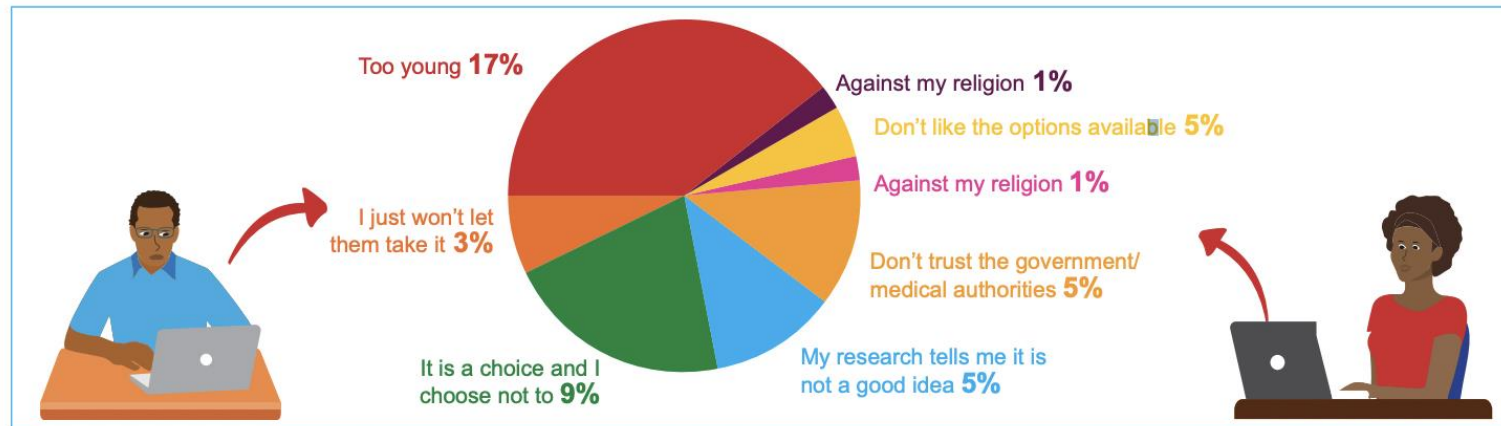


WHY WON'T THEY VACCINATE THEIR KIDS?

General views and opinions on the vaccination of children

Respondents were asked if they would agree to have their children vaccinated against COVID-19. Most said they would not at the **pre-primary and primary** level. However, the majority agreed to vaccination at the **secondary** and **post-secondary** levels.

The main reason why respondents were hesitant to have their children vaccinated related to their age (17% said their children were too young), followed by 9% saying 'I choose not to'. This rationale was consistent across all the countries.



When parents allowed their children to take these vaccines, this tended to follow respondents having done more research or speaking to their doctor or paediatrician.

KIDS DON'T GET COVID???

PEDS IN PARTICULAR: JAN 2022 2 MILLION KIDS WITH OMICRON



MOST COMMON SIDE EFFECT OF VACCINES? ADULTHOOD!



POLL 2: SHOULD FOLKS WITH IDD RECEIVE THE COVID-19 VACCINE? YOUR ANSWERS



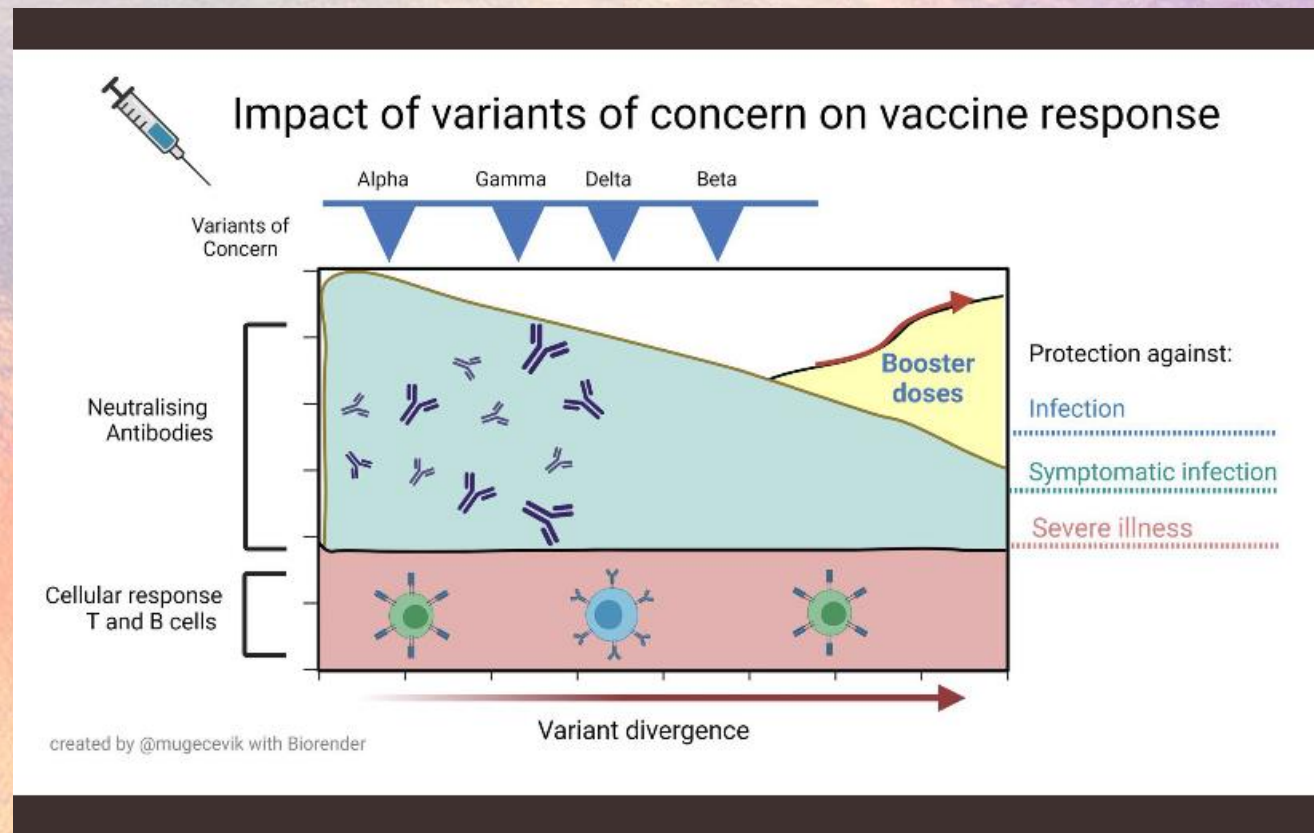
THE VACCINE IS RISKIER THAN THE DISEASE



VACCINE SUPERPOWERS!

- VACCINATED – LOWER RISK OF CATCHING COVID-19
- VACCINATED - LOWER RISK OF SPREADING COVID-19 (CDC)
- VACCINATE AFTER DISEASE? PROVIDES ADDED PROTECTION AGAINST HOSPITALIZATION AND DEATH (CDC)
- TWO DOSE VAX SIGNIFICANTLY REDUCES DEATH AND HOSPITALIZATION - BY 80-90%
 - 22,000 IN BRAZIL, STANFORD.EDU 2022
- *OLDER FOLKS – 4TH DOSE COVID VAX LOWERED RISK OF INFECTION, SYMPTOMATIC INFECTION AND DEATH BY 52-76% (ISRAELI)
 - NEJM 2022
- TEST OF TIME: MRNA VACCINES CONTINUED TO BE HIGHLY EFFECTIVE AGAINST NEED FOR VENTILATOR OR DEATH, EVEN DURING OMICRON SURGE
 - MMR 2022

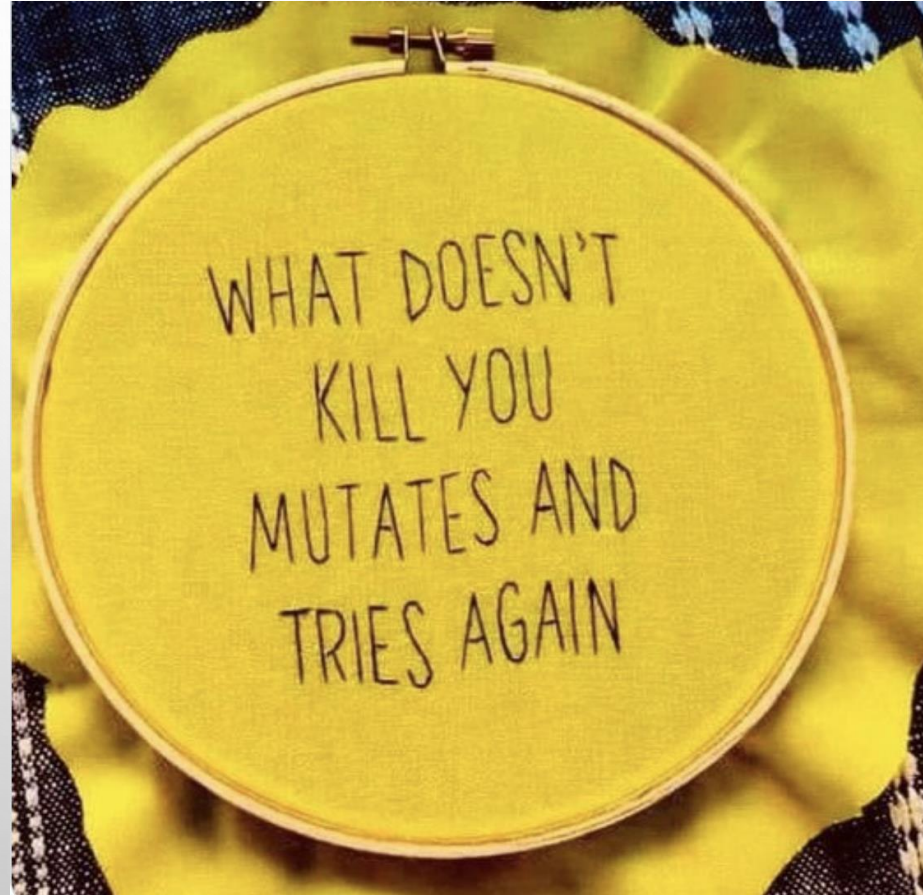
Myth – vax immunity doesn't last or won't stand up to variants: I have had covid 3 times so I am immune



MY DUDE, YOUR LOGIC FLAWED



MYTH: WHAT ABOUT THE VARIANTS?



Laura Martínez @miblogestubl... - 12h
omicron, waiting for me to leave my house



76

1,854

14K




Protection highest after vax 3 during omicron surge...

Protection was highest in adults who received a third vaccine dose, reducing the risk for COVID-19 associated ventilation or death during the Omicron period by 94%.

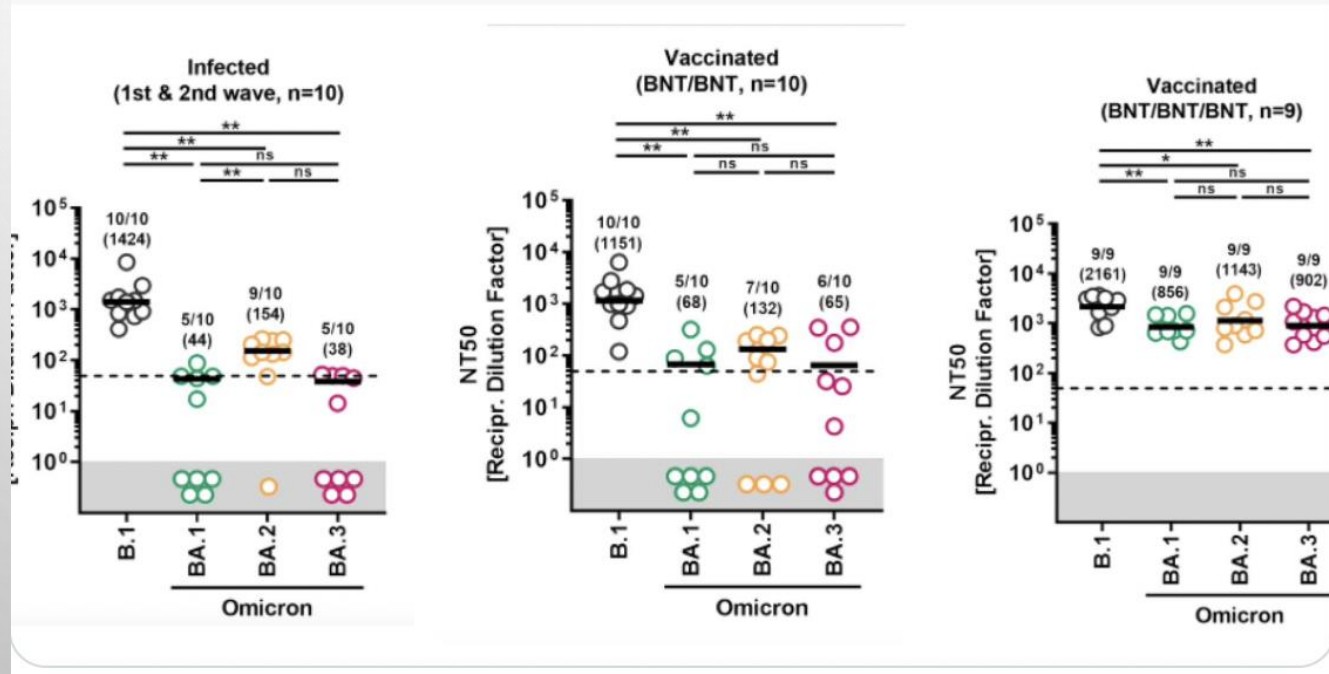


VARIANTS, SMARIANTS!

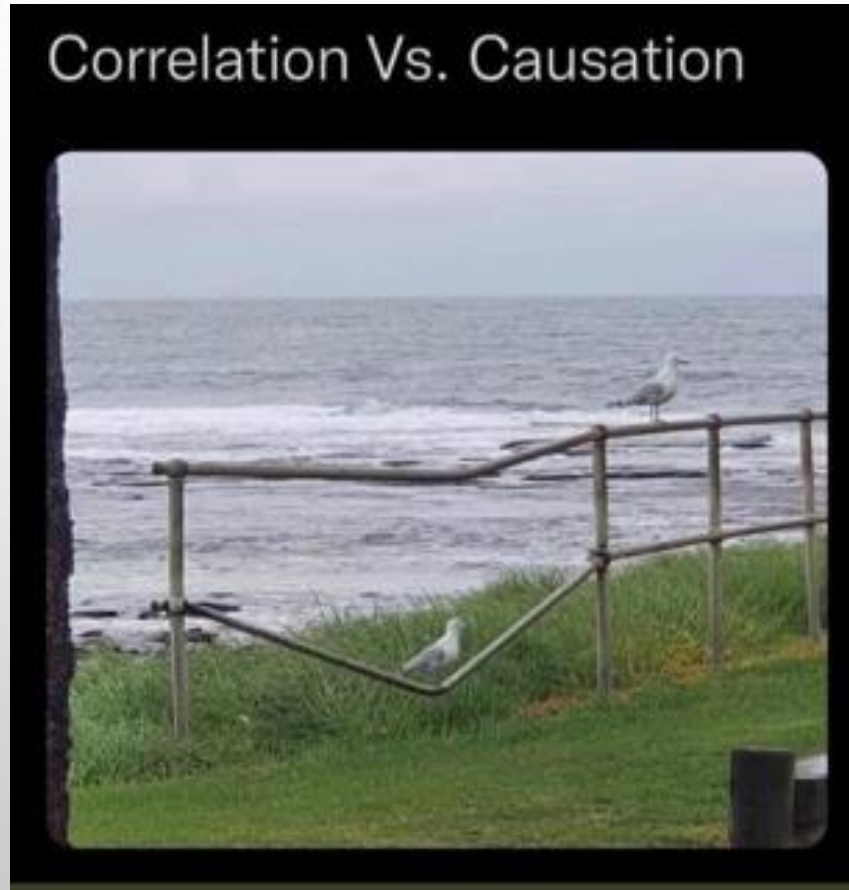
 **Eric Topol**  @EricTopol · Apr 12

For the Omicron BA.1, BA.2 and BA.3 variants there are similar neutralizing antibody responses, most potent with a 3rd dose 

These 3 variants have immune evasive properties, but fortunately BA.2, now dominant throughout most of the world, is not > BA.1
[thelancet.com/journals/lanin...](https://www.thelancet.com/journals/lanin...)



BUT I KNOW THIS ONE FRIEND OF MY COUSIN'S HAIRDRESSER





POLL NUMBER 3: WHERE DID THE SAYING, “RAINING CATS AND DOGS” COME FROM?

- A. THE WEATHER GIRLS COINED IT AFTER THEY RAN OUT OF MEN
- B. IN MEDIEVAL TIMES, DURING A HEAVY RAIN STORM THE THATCHED ROOFS WOULD COLLAPSE AND THE DOGS AND CATS SLEEPING ON TOP WOULD COLLAPSE INTO THE HOUSE ALONG WITH THE SATURATED ROOFS.
- C. "CAT" IS SHORT FOR CATION WHILE, "DOG" IS SHORT FOR A DOGE-ION (NEWLY DISCOVERED AND NAMED AFTER THE BITCOIN) AND IS USED TO DENOTE AN ICON-STORM.



SO, WE'VE HAD GOT OURSELVES A PROBLEM!
THE WAY TO GET STARTED IS TO QUIT TALKING
AND BEGIN DOING.

WALT DISNEY

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TOPIC 3
WHAT CAN WE DO AFTER THE
FACT?



*INFECTION MITIGATION: WHAT CAN
WE DO TO STOP THE SPREAD?*





HOW TO PREVENT THE SPREAD OF COVID-19 IN THE HOME

Transmission 3 Ways

1. Close Proximity

Very Dangerous, can inhale a lot of exhaled breath from someone else w/virus-containing aerosols

2. Shared Room-Air

People in the same room for a period of time, but not very close

3. Long-range transmission: transmission when not in the same room

Not as risky, but possible – Transmission in quarantine hotel in New Zealand, likely air flow under doors

Source: Jose-Luiz Jimenez, Twitter 2022



HOME ENVIRONMENT

- VENTILATION IS THE KEY:
- AIR PURIFIERS
- HVAC VENTILATION
- HEPPA FILTERS
- KITCHEN/BATH EXHAUST

Ways to improve ventilation and air filtration in your home



Open windows and doors regularly to create a cross-breeze of fresh air.



Use a heating, ventilation and air conditioning (HVAC) system.



Run heat or energy recovery ventilators continuously.



Run kitchen or bathroom exhaust fans continuously at low speed with open windows.

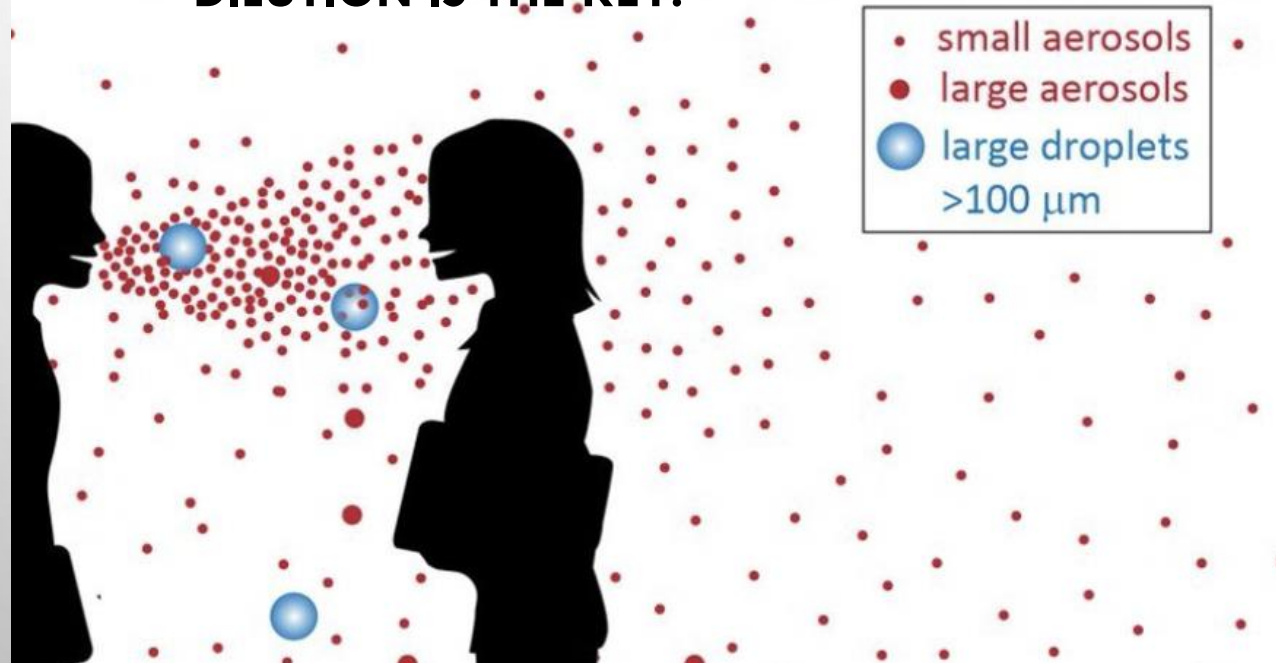


Use a portable air purifier with a high-efficiency particulate air (HEPA) filter.

- **SOURCE: DR. THERESA TAM**

Linsey Marr, published in [https://www.journalofhospitalinfection.com/article/S0195-6701\(21\)00007-4/fulltext](https://www.journalofhospitalinfection.com/article/S0195-6701(21)00007-4/fulltext)

DILUTION IS THE KEY!



- CLOSE PROXIMITY, LOW DILUTION, LOTS OF TRANSMISSION
- SHARED ROOM: LOW DILUTION IF LOW VENTILATION, LIKELY **SUPERREADER**
- LONGER RANGE (NOT SAME ROOM): HIGHER DILUTION, MORE DIFFICULT TO SPREAD UNLESS AIR PATH WITH LOW DILUTION



HUMIDITY 40-60 % IS IDEAL

Adequate RH:

Viruses die more quickly

Low Humidity – droplet evaporates more quickly and virus stays suspended in air

Better humidity – virus will fall

Low humidity makes us more susceptible to viruses

Winter time: run humidifiers but clean them frequently

When Someone is Sick

N95's

Some type of eye protection

Open windows

Turn on Filters

Especially run filter in isolation room

Open doors and windows often

Paper plates and disposable utensil

Set up an anteroom

Wipe down high touch surfaces

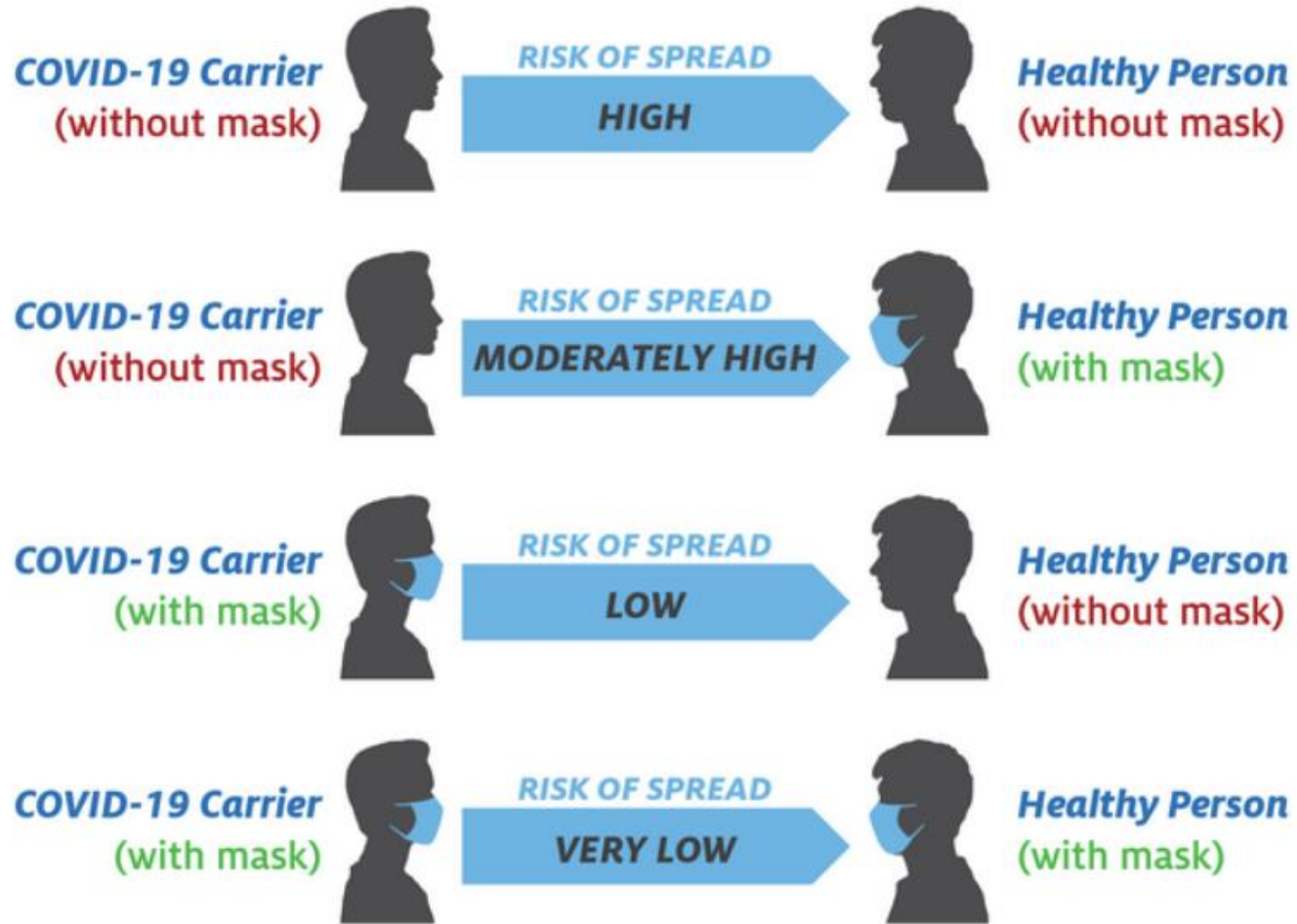


LET'S TALK MASKS!



WEAR A MASK TO PROTECT YOURSELF AND OTHERS

@ESPORTSWOMEN





COVID-19 and IDD

MASK RESEARCH

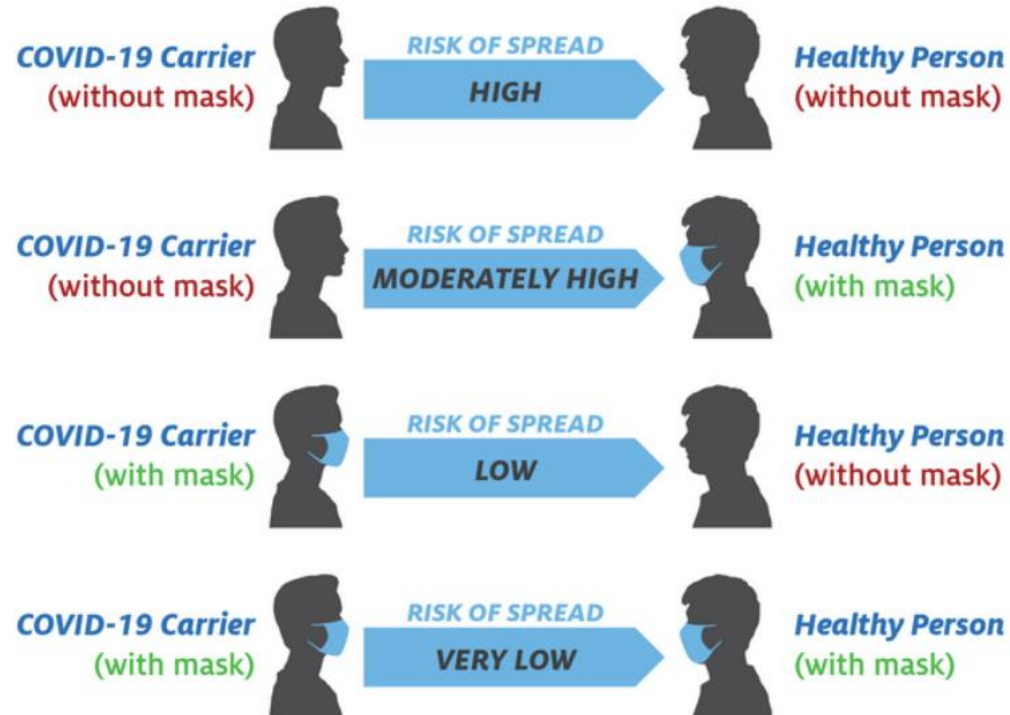
TO BE FAIR, I AM AS TIRED OF WEARING MASKS AS YOU ARE!








BEST

WEAR A MASK TO PROTECT YOURSELF AND OTHERS





@ESPORTSWOMEN



COMPARISON OF VARIOUS MASKS

CHOOSING THE RIGHT MASK					
LEVEL OF PROTECTION	DIFFERENCE	PROTECTION AGAINST		PROTECTION FOR	
		DROPLET TRANSMISSION	AIRBORNE TRANSMISSION	WEARER	THOSE AROUND THE WEARER
Level 1 CLOTH MASK (loose fit) 	- better than no mask - no electrostatic charge to attract and trap virus particles - additional layers will improve protection but not enough to offer a reliable level of protection from infection	MINIMAL +	MINIMAL +	MINIMAL +	MINIMAL +
Level 2 SURGICAL MASK, P1 (loose fit) 	- gaps allow the virus to bypass mask - not considered respiratory protection - provides moderate protection against droplets transmission - little protection from airborne transmission	MODERATE ++	MINIMAL +	MINIMAL +	MODERATE ++
Level 2 (+) SURGICAL MASK WITH BRACERS (tight fit) 	- bracers help seal the surgical mask so that all air has to pass through the filter material - provides respiratory protection similar to an N95	GREAT ++++	GREAT ++++	GREAT ++++	GREAT ++++
Level 3 N95 WITH EXHALATION VALVES (tight fit) 	- uncovered valve offers better source protection than surgical masks - valve can be covered with a surgical mask to further improve source control protection - minimum level of protection needed to properly protect the wearer from the virus	GREAT ++++	GREAT ++++	GREAT ++++	GOOD +++
Level 3 (+) N95, KF94, KN95, FFP2, P2 (tight fit) 	- provides great protection for wearer and those around them from airborne AND droplet transmission - filters at least 95% of airborne particles at .3 microns - not made to be reused	GREAT ++++	GREAT ++++	GREAT ++++	GREAT ++++

NEXT LEVEL MASKS

<p>Level 4 N99, N100, FFP3, P3 KN99, KN100 (tight fit)</p> 	<p>-filters at least 99% of airborne particles at .3 microns -provides 100% protection to the wearer -disposable but less familiar than N95s -if it is one without a valve, it offers exceptional protection as source control</p>	<p>EXCEPTIONAL ++++++</p>	<p>EXCEPTIONAL ++++++</p>	<p>EXCEPTIONAL ++++++</p>	<p>GOOD (valve) ++++ EXCEPTIONAL (No valve) ++++++</p>
<p>Level 5 ELASTOMERIC RESPIRATOR WITH EXHALATION VALVES & N99, P99, N100, P100, FFP3 OR P3 FILTERS (tight fit)</p> 	<p>-uncovered valve offers better source protection than surgical masks -valve can be covered with a surgical mask to further improve source control protection -much higher protection than N95s -are available in half face & full face options -made to be reused for months to years</p>	<p>EXCEPTIONAL ++++++</p>	<p>EXCEPTIONAL ++++++</p>	<p>EXCEPTIONAL ++++++</p>	<p>GOOD ++++</p>
<p>Level 5 (+) ELASTOMERIC RESPIRATOR WITHOUT EXHALATION VALVES & N99, P99, N100, P100, FFP3 OR P3 FILTERS (tight fit)</p>  	<p>-the most cost effective option for virus protection -provides a much better seal than N95s -filters at least 99% of airborne particles at .3 microns. -provides 100% protection to the wearer & those around the wearer -made to be reused for months to years</p> <p>*an elastomeric respirator with N95, KN95, KF94, FFP2 or P2 filters will offer better protection than a level 3 mask but less than a level 4/5 mask *PAPRs are not very common. They provide exceptional protection to the wearer but may not offer reliable protection as source control</p>	<p>EXCEPTIONAL ++++++</p>	<p>EXCEPTIONAL ++++++</p>	<p>EXCEPTIONAL ++++++</p>	<p>EXCEPTIONAL ++++++</p> <p>@PPEtoheros Revised Oct. 11, 2021</p>

WHAT MAKES N95 SPECIAL? IT'S A STATIC THING!

- FIBERS IN MASK ARE ELECTRICALLY CHARGED
- POSITIVELY CHARGED MASK FIBERS ATTRACT DROPLETS FROM ANOTHER PERSON
- FIBERS TRAP THE DROPLETS IN MASK

- *SOURCE: WIRED*



KN95's – same principle



COVID-19 AND IDD

KN95 VS N95'S

- BOTH FILTER OUT 95 % OF PARTICLES
- N95'S HAVE INDUSTRIAL AND HEALTHCARE USES
- KN95 IS CHINA'S VERSION OF N95
- US APPROVES ONLY
- N95'S ARE MEANT TO BE FIT-TESTED
- BOTH HAVE NOSE CLIP FOR BETTER FIT
- THEY HAVE SOME SIMILARITIES AND A FEW DIFFERENCES
 - SOURCE ALLY SAFETY AND PHOTOS: LA TIMES, AMAZON COVID-19 AND IDD





HOW TO TELL IF KN95 MASK IS COUNTERFEIT?

- POOR WATER IN IT - IT SHOULDN'T LEAK
- TRY TO BLOW OUT A MASK HELD ABOUT 6 INCHES AWAY
- NO MATTER HOW HARD YOU TRY, SHOULD NOT BE ABLE TO BLOW IT OUT



Be Prepared!



Roll over image to zoom in



YOU WILL THANK ME FOR THIS!

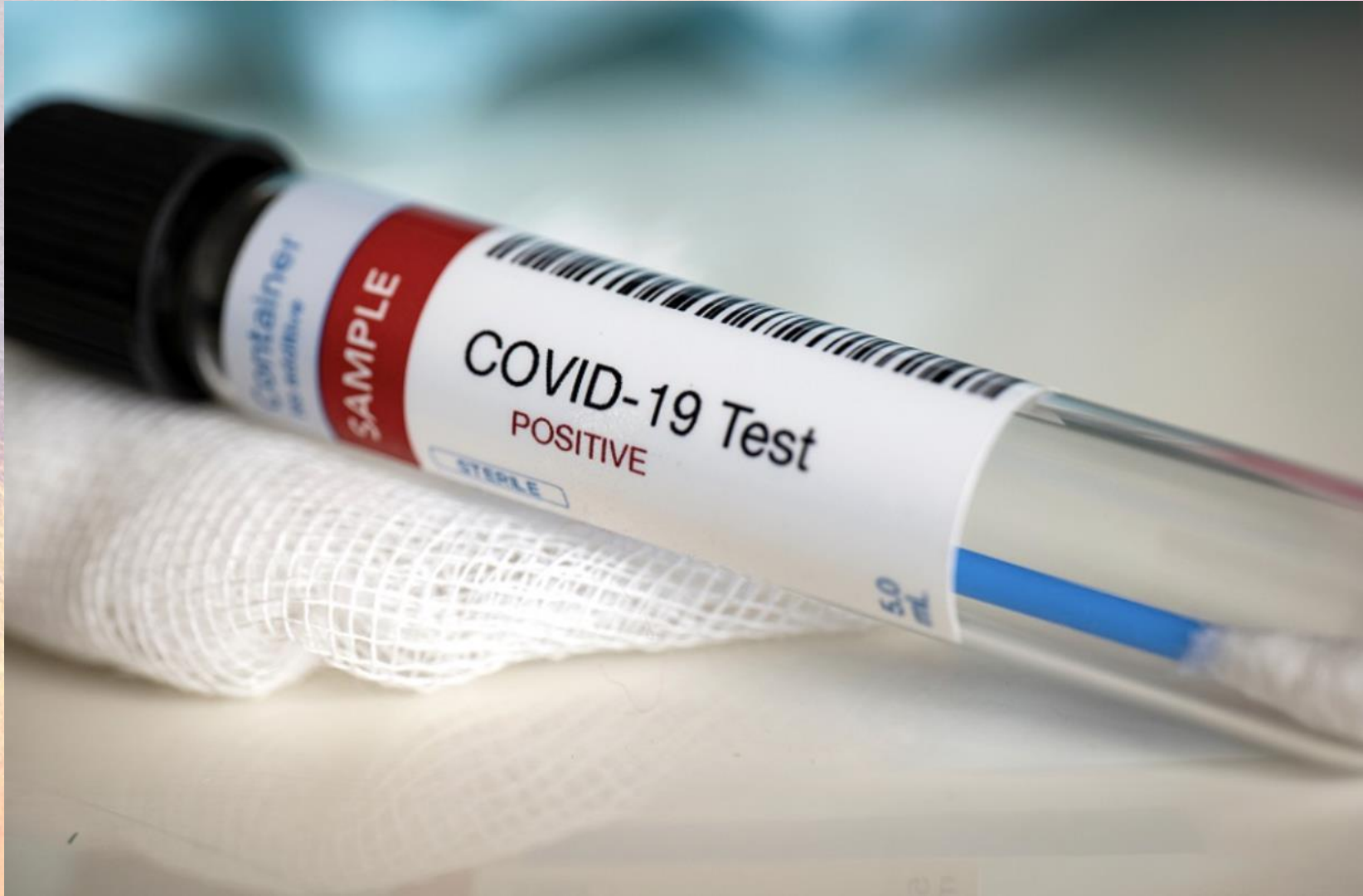


TOPIC 3
WHAT CAN WE DO AFTER THE
FACT?



TESTING







RAPID ANTIGEN VS PCR VS ANTIBODY

RAPID ANTIGEN

- NOSE
- BEST POSITION IS HEAD BACK, MOUTH SLIGHTLY OPEN
- IF IT SAYS IT'S POSITIVE, LIKELY IS POSITIVE

COVID-19 rapid tests are inexpensive and fast but sometimes give incorrect results*



1 in 5 patients with symptoms and confirmed COVID-19 received a negative rapid antigen test result

* 1,098 paired nasal swabs collected at 2 universities in Wisconsin, September 28–October 9, were tested using Sofia SARS Antigen FIA and compared to rRT-PCR/viral culture results.

People with **symptoms** and a **negative rapid test** should



Get a confirmation (RT-PCR) test



Wear a mask



Stay home in a separate room

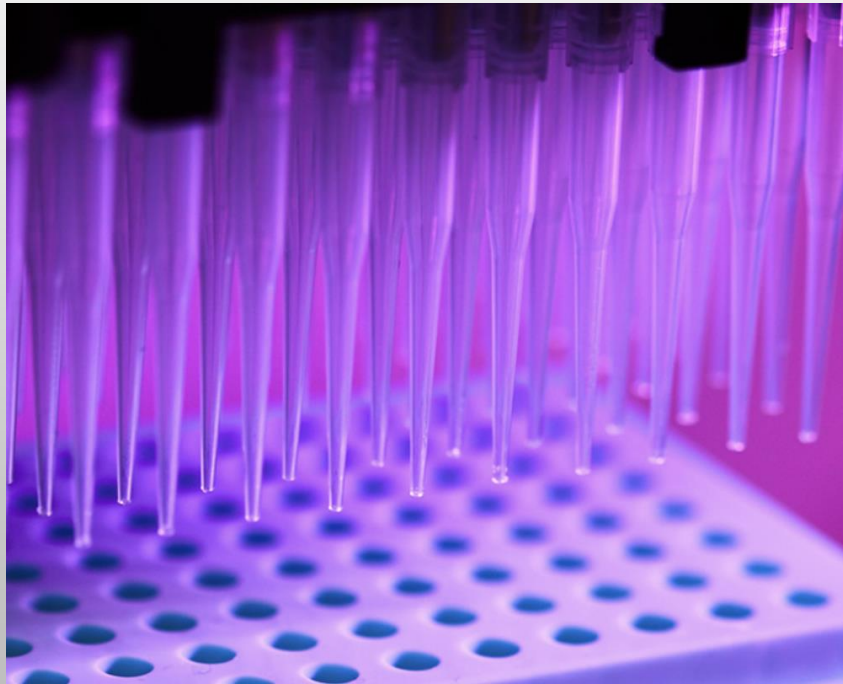
CDC.GOV

bit.ly/MMWR123120

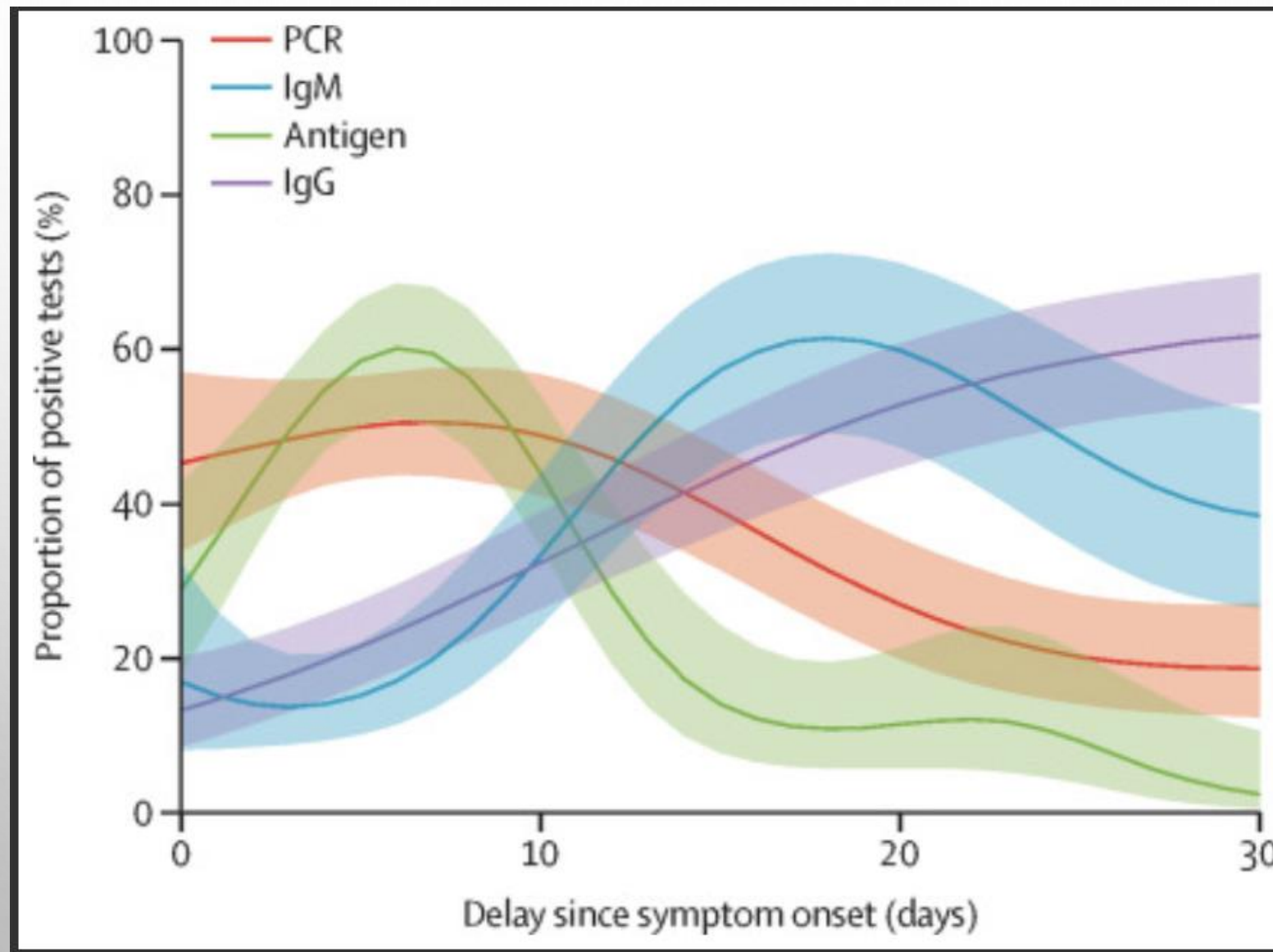
MMWR

- SOURCE: CDC

PCR TESTS: HIGHLY ACCURATE



PCR: BEST TIME TO TEST 3-5 DAYS AFTER EXPOSURE



POLL NUMBER 3: WHERE DID THE SAYING, “RAINING CATS AND DOGS” COME FROM?

- a. The weather girls coined it after they ran out of men
- b. In medieval times, during a heavy rain storm the thatched roofs would collapse and the dogs and cats sleeping on top would collapse into the house along with the saturated roofs.
- c. "cat is short for cation while, "dog" is short for a doge-ion (newly discovered and named after the bitcoin) and is used to denote an icon-storm.

TOPIC 3
WHAT CAN WE DO AFTER THE
FACT?



TREATMENT



CURRENT APPROVED THERAPIES

PAXLOVID: ORAL ANTIVIRAL PILL (Pfizer) Protease inhibitor – stops viral replication

- 3 tablets once daily for 5 days (within first 5 days symptoms)
- 88% lower risk hospitalization and Death

MOLNUPIRAVIR: Oral antiviral pill (Merck) use when other Covid treatment are not accessible

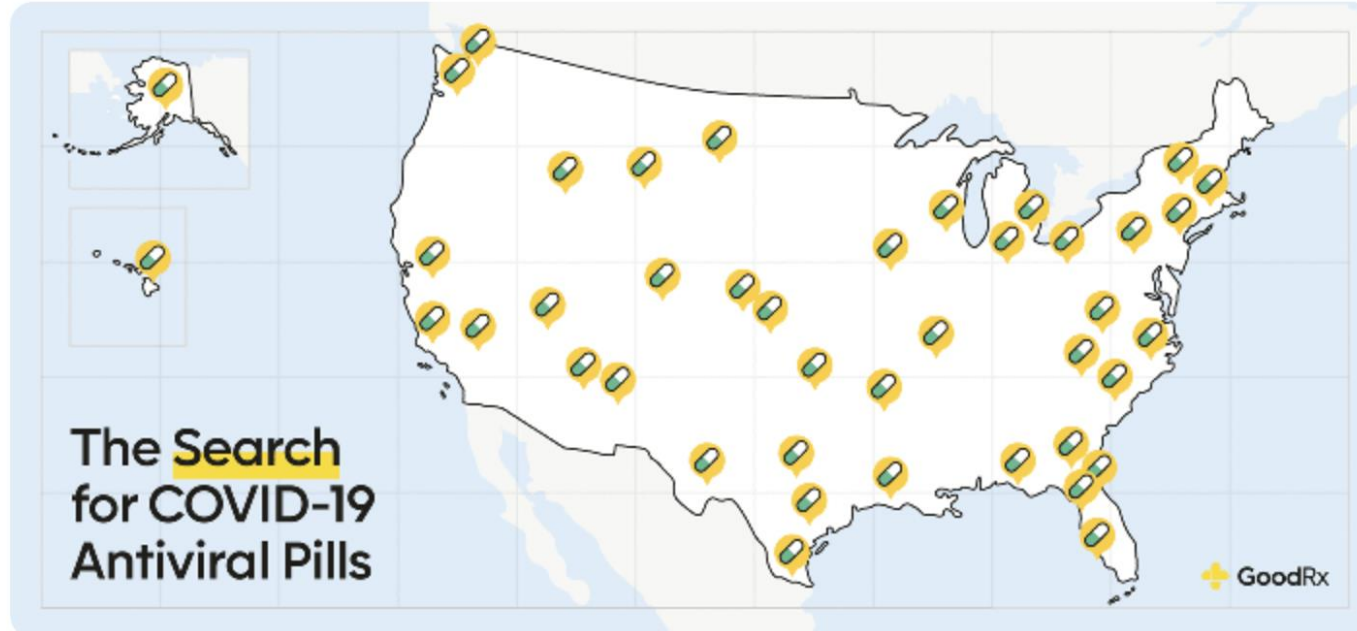
- Decreased hospitalization rate by 30 %

MONOCLONAL ANTIBODY – IV – Bebtelovimab & Etesevimab (Eli Lilly) FDA –Shown to be effective against BA.2

- Treat non-hospitalized adults and hospitalized children
- *Source: Harvard Health Publishing, FDA*

WHERE TO FIND THE MEDICATIONS?

[HTTPS://WWW.GOODRX.COM/CONDITIONS/COVID-19/COVID-PILL-COST-AVAILABILITY](https://www.goodrx.com/conditions/covid-19/covid-pill-cost-availability)





THE GRADY DOCTOR

- [HTTPS://WWW.AJC.COM/NEWS/CORONA VIRUS/DR-KIMBERLY-MANNING-YES-WE-CAN-REACH-THE-UNVACCINATED/ZMNQOJIGHBASBDTMODP TVD7QAQ/](https://www.ajc.com/news/corona-virus/dr-kimberly-manning-yes-we-can-reach-the-unvaccinated/zmnqojighbasbdtmodp-tvd7qaq/)

LOVE is
the absence of
judgement.

Dalai Lama

PositiveMotivation.net



COVID-19 and ID

QUESTIONS???



Amanda Gorman 
@TheAmandaGorman

Continue hoping/living/
loving/trying. The most
human thing we can do at any
given time is dare to believe
beyond disaster.

