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Chicken Egg Yolk Antibodies (IgYs) block the binding of multiple SARS-CoV-2 spike protein variants to human ACE2

Int Immunopharmacol. 2021 Jan; 90: 107172.

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Abstract

The SARS-CoV-2 virus is still spreading worldwide, and there is an urgent need to effectively prevent and control this pandemic. This study evaluated the potential efficacy of Egg Yolk Antibodies (IgY) as a neutralizing agent against the SARS-CoV-2. We investigated the neutralizing effect of anti-spike-S1 IgYs on the SARS-CoV-2 pseudovirus, as well as its inhibitory effect on the binding of the coronavirus spike protein mutants to human ACE2. Our results show that the anti-Spike-S1 IgYs showed significant neutralizing potency against SARS-CoV-2 pseudovirus, various spike protein mutants, and even SARS-CoV *in vitro*. It might be a feasible tool for the prevention and control of ongoing COVID-19.

1. Introduction

The ongoing COVID-19 pandemic caused by severe acute respiratory syndrome-coronavirus SARS-CoV-2, a novel strain of coronaviruses, has rapidly spread and evolved since the end of 2019 [1]. To date, SARS-CoV-2 accounts for more than 40 million infections and more than 1.1 million COVID-19 -related deaths worldwide. Worryingly, there are still no available vaccines or antiviral drugs against the SARS-CoV-2.

Previous studies have demonstrated that the spike (S) glycoprotein homotrimer on the surface of SARS-CoV-2 plays an essential role in human ACE2 receptor binding and virus invasion [2]. Therefore, neutralizing antibodies against SARS-CoV-2 spike glycoprotein present the most promising approach against COVID-19. Besides, several neutralizing antibodies that target the receptor binding domain (RBD) of SARS-CoV-2 have been isolated from convalescent patients [3]. Despite the advancements, the use of monoclonal antibodies in the treatment of COVID-19 faces a wide range of safety threats that are yet to be addressed [4]. Besides, the high production cost and low yield might complicate the use of the neutralizing antibodies, especially in the developing world. Therefore, there is need to explore other strategies that might be more economically suitable and feasible in the fight against COVID-19 prevention and control.

The first report about Egg Yolk Antibodies (IgY) as a neutralizing agent against tetanus toxin was published in 1893 [5]. Three years later, Behring and S. Kitasato discovered the diphtheria antitoxin (the 1901 Nobel Prize in Physiology or Medicine). The use of IgYs did not gain clinical significance and wide application until the advent of the 3Rs principle that was first described by Russell and Burch in 1959, The IgYs gained more

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attention for their stable chemical properties, low cost, high yield, and improved animal welfare. More importantly, IgYs neither bind the human rheumatoid factors, nor activate the human complement system, which minimizes the risks of inflammation [6]. As a passive immune agent against viral and bacterial diseases, IgYs have the potential to make functional foods and new drugs. Several IgY formulations have been approved to treat goose plague, duck plague, and other diseases by China Veterinary Pharmacopoeia. IgY antibodies have also been applied to combat human viral infections such as the respiratory syncytial virus (RSV), influenza virus, and Coxsackie virus. In one study, anti-SARS coronavirus IgYs were purified from chicken that were immunized with inactivated SARS coronavirus, and the IgY antibodies were able to neutralize the SARS coronavirus both *in vitro* and *in vivo* [7].

Here, we purified anti-spike-S1 IgYs from hens that were immunized with the S1 domain of the SARS-CoV-2 spike protein and interrogated their ability to neutralize SARS-CoV-2 pseudovirus using Hela cells with overexpressed human ACE2. In addition, we used competition ELISA assays to validate the IgY's competitive binding to various SARS-CoV-2 Spike protein mutants, as well as the SARS-CoV Spike protein.

Go to:

2. Materials and methods

2.1. Preparation and quantification of anti-S1 IgY

DNA sequence encoding S1 of SARS-CoV-2 Spike protein was codon-optimized and synthesized by GenScript USA, Inc ([Supplementary Materials](#)). The gene was then subcloned into pFastBac1 vector for Insect cell expression using Bac-to-Bac® Baculovirus system. The codon-optimized SARS-CoV-2 Spike-S1 was expressed in Sf9 insect cells using the baculovirus/insect cell expression system ([Fig. S1](#)). The purified recombinant SARS-CoV-2 S1 protein was mixed and emulsified with Freund's immune adjuvant in equal volume and then used as an immunogen. Each hen was injected (intramuscular) with 150 µg of the recombinant spike protein under the wings, once a week for 4 weeks, and then IgY was extracted and the titer evaluated. Here, we adopted an improved extraction as described by Sock HweeTan [8], with slight modification for subsequent processing. We removed lipids and lipoproteins, and then precipitated the supernatant with a final concentration of 15% cold ethanol, instead of ammonium sulfate. The purity of the extracted IgYs was more than 80%, without the ammonium sulfate residue and the process took less than 2 h ([Fig. S2](#)). Moreover, centrifugation could also be replaced with filtration, which makes the extraction process more suitable for large-scale industrial production. The extracted IgYs titer was quantified by indirect ELISA. Briefly, the ELISA plate wells were coated with the recombinant SARS-CoV-2 Spike-RBD protein expressed in HEK 293 cells, then serial dilutions of IgYs were added to the wells, and 1:10000 dilution of HRP-conjugated goat anti-IgY antibody was added.

2.2. Pseudovirus neutralization assay

The blocking potency of IgYs on the SARS-CoV-2 pseudovirus was evaluated by luciferase-generated luminescence. Here, Hela monoclonal cells with overexpressed ACE2 were infected with the lentivirus carrying SARS-CoV-2 spike protein and the luciferase reporter gene (GenScript Co., Nanjing, China). The IgYs' ability to neutralize the antigen was evaluated by performing the pseudovirus neutralization assay, as reported by the luciferase reporter gene ([Supplementary Materials](#)).

2.3. Competition ELISA

We used a competition ELISA to evaluate the ability of the IgYs to inhibit binding of eight different coronavirus spike protein mutants (including seven SARS-CoV-2 spike proteins and one SARS-CoV spike protein) to the human ACE2. The SARS-CoV-2 RBD or RBD mutants (Table S2) were incubated overnight at 4°C in high bind 96 well plate. A serial dilution of purified the IgY and 0.3 ng/well Fc tagged human ACE2 (Cat. No. AC2-H5257, ACROBiosystems) were added into the coated plate and then incubated for 1 h at 37 °C. HRP-conjugated anti-human Fc (1:20000) (Cat. No. 109-035-098, Jackson ImmunoResearch) was added as the secondary antibody. The OD450 were read by plate reader. All data were analyzed using GraphPad Prism 8.

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3. Results

The results showed that the ELISA titer of IgYs reached 2 [10] after the third booster. The pseudovirus neutralization assay data showed that the IC50 values for the anti-(SARS-Cov-2) IgYs was 270.5 µg/mL, with maximum inhibition of 75.86%. On the other hand, the control IgYs had no obvious inhibitory effect, indicating that the anti-(SARS-Cov-2) IgYs had a neutralizing activity (Fig. 1). However, compared with the reported monoclonal antibodies, the IC50 value for the IgYs was relatively high. We associated this phenomenon with the fact that, like the other polyclonal antibodies, only about 10% of the IgYs specifically recognized SARS-CoV-2, and the proportion of IgYs with neutralizing activity was even lower. Whereas the IC50 for the polyclonal IgYs was high, theoretically, the IgYs should have multiple sites for the neutralizing activity.

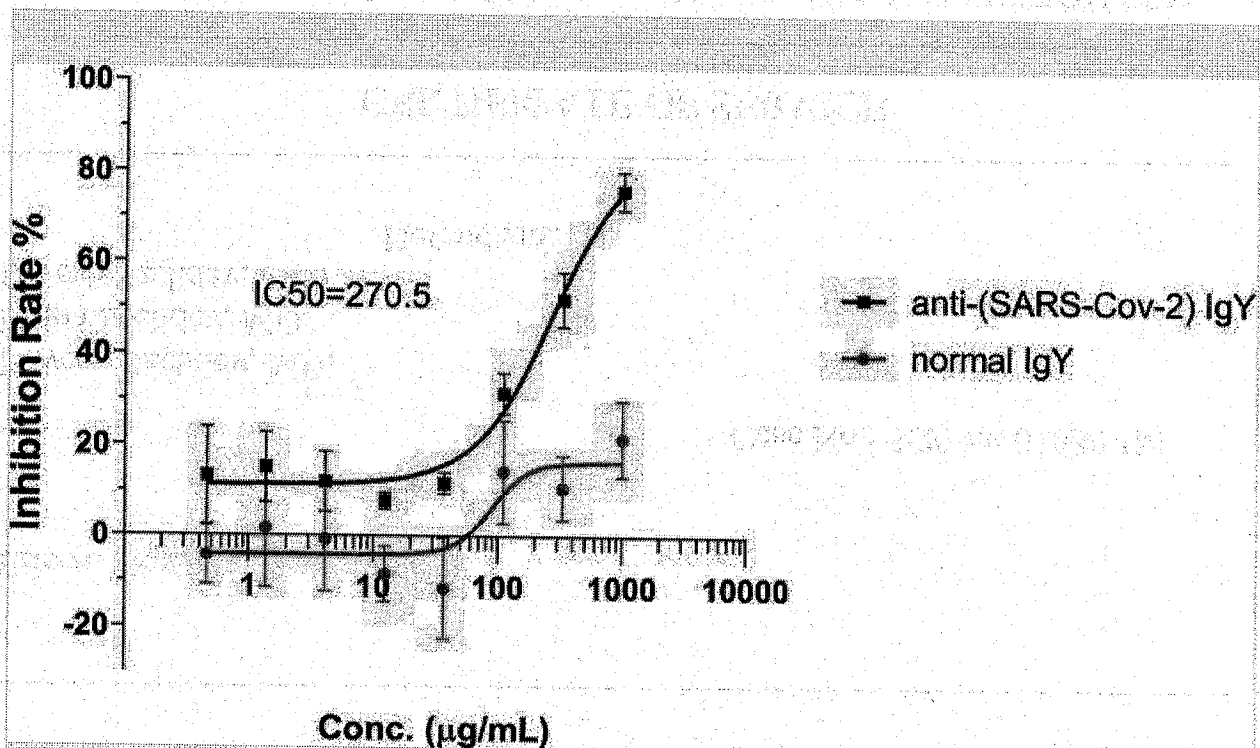


Fig. 1

Luminescence inhibition rate curve of the anti-(SARS-Cov-2) IgY (blue) and normal (control) IgY (red) from the pseudovirus neutralization assay. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

Anti-(SARS-Cov-2) IgYs showed obvious competition with ACE2 in binding both the wild type SARS-Cov-2 ($IC_{50} = 309.9 \mu\text{g/mL}$) and SARS-Cov ($IC_{50} = 617.9 \mu\text{g/mL}$) spike proteins. Besides, IgYs also showed competitive binding to the six SARS-Cov-2 spike protein mutants [9] (W436R, R408I, N345D, V367F, N345D/D364Y, and the more dominant mutant D614G) [10] with an IC_{50} range of 324.0–490.9 $\mu\text{g/mL}$ (Fig. 2).

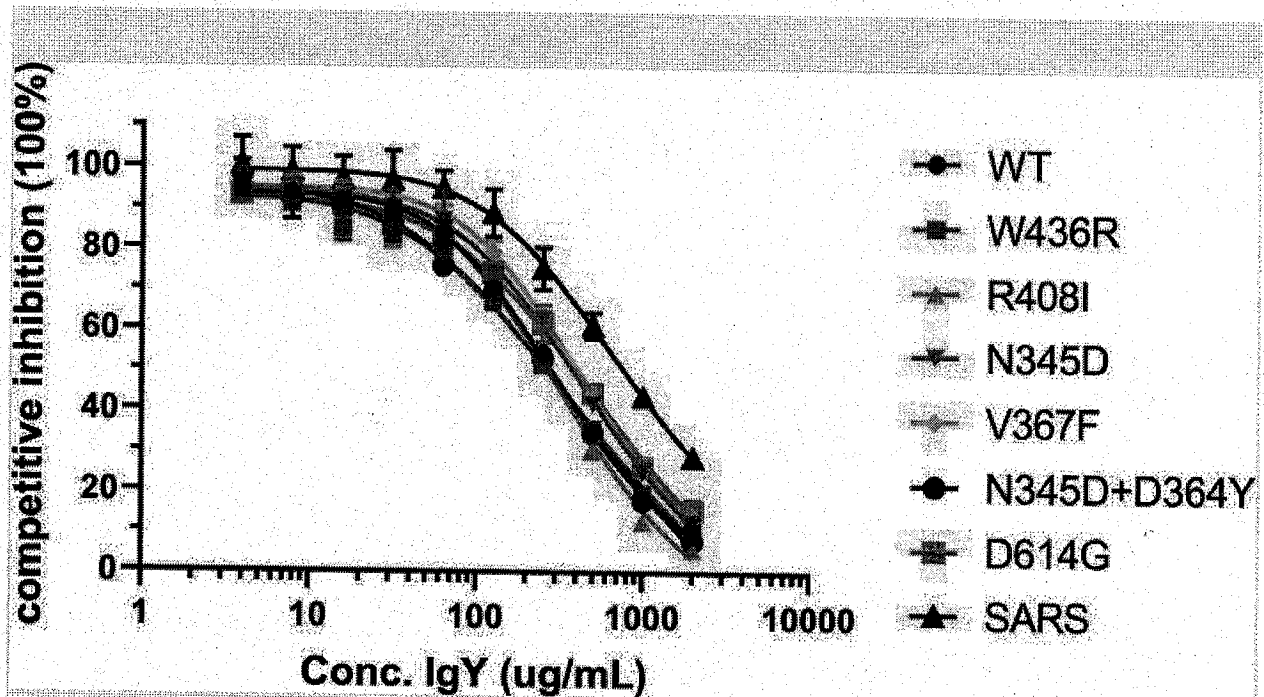


Fig. 2

Competitive inhibition of the eight coronavirus spike protein mutants as determined by competitive ELISA.

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4. Conclusion

In summary, the anti-Spike-S1 IgYs showed significant neutralizing potency against SARS-CoV-2 pseudovirus, various S mutants, and even SARS-CoV *in vitro*. However, the safety and efficacy of the IgYs still needs further interrogation in animal models.

At present, the SARS-CoV-2 virus is still spreading around the world, and there is much to be done to prevent and control the pandemic. The use of IgYs in aerosol or spray formulations on the respiratory tract, the oral cavity, and even the digestive tract may be a worthwhile strategy. It might prevent the invasion of the SARS-CoV-2 virus through the natural infection route. Long-term control of the SARS-CoV-2, however, will require a combination of active and passive immunization tools, drug therapy, and other preventive measures.

2.1

Steve Kirsch: FAA quietly admits many pilots are now experiencing abnormal EKGs...

January 17, 2023

Steve Kirsch has shared a very eye-opening and rather disturbing Substack newsletter involving the FAA, pilots, and abnormal EKGs. Three things you never want to hear about in succession. And what Steve reveals about what he says is *really going on* behind the scenes should have everyone very concerned.

Steve Kirsch:

In the October 2022 version of the FAA Guide for Aviation Medical Examiners, the FAA quietly widened the EKG parameters beyond the normal range (from a PR max of .2 to unlimited). And they didn't widen the range by a little. They widened it by a lot. It was done after the vaccine rollout.

This is extraordinary. They did it hoping nobody would notice. It worked for a while. Nobody caught it.

But you can't hide these things for long.

This is a tacit admission from the US government that the COVID vaccine has damaged the hearts of our pilots. Not just a few pilots. A lot of pilots and a lot of damage.

The cardiac harm of course is not limited to pilots.

My best guess right now is that over 50M Americans sustained some amount of heart damage from the shot.

That's a lot of people who will be very upset when they realize the vaccine they took to reduce their chance of dying from COVID actually worked in reverse making it:

1. More likely that people will get COVID
2. Be hospitalized from COVID and other diseases
3. Die from COVID (and other diseases)
4. You also have an excellent chance of getting a lifetime of heart damage for no extra charge.

And the kicker is you can't sue them for negligence:

They fixed the law so none of them aren't liable (the doctors, the drug companies, the government). After all, you took the vaccine of your own free will. It's not like you were forced (or coerced) to take it or anything like that! And there were plenty of people warning you not to take the shots (even though they censored most of them).

Steve explains what the FAA "quietly" started doing:

On October 24, 2022, the FAA quietly, without any announcement at all, widened the EKG requirements necessary for pilots to be able to fly.

The PR (a measure of heart function) used to be in the range of .12 to .2.

It is now: .12 to .3 and potentially even higher.

This is a very wide range; it accommodates people who have cardiac injury. Cardiologist Thomas Levy is appalled at this change.

You're probably wondering why the FAA did that.

Well, Steve believes it's because they knew if they kept the original range, too many pilots would have to be grounded.

Just a couple of months ago an airline crew member had a sudden heart attack aboard a flight heading to Paris.

Simple Flying:

2.2

On Tuesday, November 22nd, a Gulf Air Airbus A321 made an emergency diversion in flight after a crew member suffered a heart attack. The flight was scheduled to fly from Bahrain International Airport (BAH) to Paris Charles de Gaulle Airport (CDG). After the crew member was taken ill, the flight made an emergency diversion to Iraq's Erbil International Airport (EBL), where the crew member was rushed to the local hospital. Unfortunately, the crew member was declared dead by Erbil's medical services shortly afterward.

Around that very same time period, a US pilot died suddenly shortly after takeoff from Chicago O'Hare.

CBS News:

The Federal Aviation Administration is investigating after an American Eagle pilot suffered a medical emergency shortly after taking off from O'Hare International Airport this past Saturday night.

The pilot of American Eagle (Envoy) Flight 3556 later died at an area hospital.

The copilot was heard calmly telling air traffic controllers about what had happened, and requesting paramedics.

Back in June a Scottish pilot became suddenly ill and locked himself in the bathroom. The copilot had to make an emergency landing.

From Mirror UK:

An easyJet flight was forced to make an emergency landing when the pilot fell ill and reportedly rushed to the loo mid-air.

EasyJet flight EZY6938 was approaching Edinburgh Airport in the early hours of Sunday morning after flying from Heraklion in Greece.

The crew sent out a Live Squawk 700 alert, which was a request for an expedited landing.

The first officer took control of the craft around 1.20am.

Passengers said the pilot was seen entering the toilet and did not come out until it had landed.

EasyJet confirmed that the first officer did land the plane, but did not say whether the captain remained in the toilet until after the plane had landed.

This Rumble video from TOGA asks, "Do 30 percent of pilots have heart damage from the job?" Meanwhile, many so-called "experts" are trying to steer blame away from the vaccine, and instead are blaming it on COVID.

But Steve says that's another lie:

There are several clues that are consistent with "it was the vaccine and not COVID":

1. They were quiet about it. If it was COVID, you can be public. But the vaccine is supposed to be safe.
2. The timing. October 2022 is late for COVID. If it was due to COVID, it would have happened well before now. They can make changes every month.
3. The vaccine creates far more injury to the heart than COVID (which creates NO added risk per this large-scale Israeli study of 196,992 unvaccinated adults after Covid infection).
4. Anecdotally, cardiologists only started to notice the damage post-vaccine.
5. All the sudden deaths started post-vaccine.

3.1

London Professor of Oncology Calls for Urgent Stop to Covid-19 Boosters Over 'Aggressive' Cancer Relapses

by Jamie White

January 4th 2023, 2:16 pm

Professor Angus Dalgleish says he's noticed his patients have "clearly relapsed following the booster vaccine."

A cancer expert from London has called for the UK government to halt the distribution of the COVID-19 booster shots.

Angus Dalgleish, Professor of Oncology at St. Georges Hospital Medical School London, put out a video statement on social media warning that he's begun noticing his patients "relapsing" after taking the booster.

"I have started to notice that several of my patients with melanoma who've been stable," Dalgleish explained, "Stage 4 disease, they've had very good immunotherapy or other treatments, and I've been reviewing them from 5 to 20 years – I've noticed that I have now over six, possibly seven and even an eighth, who've clearly relapsed following the booster vaccine."

London Professor of Oncology calls for urgent stop to C19 boosters:

"As an Oncologist I Am Seeing People With Stable Cancer Rapidly Relapse After a C19 Booster"

Angus Dalgleish, Professor of Oncology at St. Georges Hospital Medical School London. pic.twitter.com/taBZpU9neL

— Robin Monotti (@robinmonotti) **January 3, 2023**

"At first, we didn't put the two together. But when patients said 'I've felt awful since the vaccine, I've been drained,' they've described symptoms of long Covid, and the next thing we know, two, three weeks, a couple of months later, they've got clear evidence of relapse."

Dalgleish went on to say that the relapses are "quite aggressive" and that they require "systemic therapy."

"But it's not just this," he continued. "Now, I'm very much aware in my own circle of many people who...they haven't got melanoma – they haven't had anything before – but they've got lumps and bumps and they're not feeling well."

Dalgleish noted that two of his patients specifically cited the booster as the instigator of their relapses.

"And two people I've interviewed at great length, they all put it down to feeling awful after their booster," he said. "They were fine with the first two vaccines, they just had shivers, flu, etc. But they've described being very tired, very fatigued, wanting to stay in bed. And

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this has dragged on to the point where they've gone to the doctor and they've had blood counts and investigations."

"And I now know seven of them. Two of them have leukemias, and others have lymphomas, and one of them has a very bad melanoma which he is absolutely sure was instigated by the booster as he developed dreadful symptoms," he noted.

Dalgleish called on the medical community to "join forces" to investigate the causality of the boosters and these oncological relapses, and if they find any, to halt the distribution of the boosters "immediately."

"So I want to bring to everybody's attention that I think this does not look like a coincidence to me, and we need to join forces and see if this is a real effect, and if it is, we must stop all the boosters immediately," he declared.

Dalgleish had previously written to Dr. Kamran Abbasi, the Editor in Chief of the *British Medical Journal* **warning that he was seeing his cancer patients rapidly deteriorate** after receiving the booster:

*The link with clots, myocarditis, heart attacks and strokes is now well accepted, as is the link with myelitis and neuropathy. (We predicted these side effects in our June 2020 QRBD article **Sorensen et al. 2020**, as the blast analysis revealed 79% homologies to human epitopes, especially PF4 and myelin.)*

However, there is now another reason to halt all vaccine programmes. As a practising oncologist I am seeing people with stable disease rapidly progress after being forced to have a booster, usually so they can travel.

...

The reports of innate immune suppression after mRNA for several weeks would fit, as all these patients to date have melanoma or B cell based cancers, which are very susceptible to immune control – and that is before the reports of suppressor gene suppression by mRNA in laboratory experiments.

Dalgleish is one of many UK experts and physicians who've been calling for investigations into the experimental COVID jabs and the boosters:

This comes after one of Britain's top COVID advisers John Bell **admitted** last November that the country probably didn't even need to roll out COVID booster shots.

"I'm not entirely sure that we even needed boosters. We don't have any clear data on that," he said.

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DRUGS THAT ARE NOT LISTED

4.1

TYRANNY: Minnesota Democrat Officials Including AG Keith Ellison Want to Take Away Dr. Jensen's License after He Spoke Out About Inflated COVID Numbers

January 31, 2023 Jim Hoff

In April 2020 **Dr. Scott Jensen**, a Minnesota physician and Republican state senator said he received a 7-page document **coaching him to fill out death certificates** with a COVID-19 diagnosis without a lab test to confirm the patient actually had the virus.

"Last Friday I received a 7-page document that told me if I had an 86-year-old patient that had pneumonia but was never tested for COVID-19 but some time after she came down with pneumonia we learned that she had been exposed to her son who had no symptoms but later on was identified with COVID-19, then it would be appropriate to diagnose on the death certificate COVID-19," Dr. Scott Jensen said.

Dr. Jensen explained that this is not a normal procedure.

Dr. Jensen said for example if the same patient had pneumonia during flu season and he didn't have a test confirming the patient also had influenza, he would never diagnose the patient with influenza on the death certificate.

As TGP reported at the time, the amount of Americans who are reported to have died from the Coronavirus is based on a CDC coding system that will "result in COVID-19 being the underlying cause more often than not."

Dr. Birx confirmed this during a COVID-19 task force briefing back in April 2020.

Birx told a reporter during a Coronavirus task force briefing, "We've taken a very liberal approach to mortality."

"Can you talk about your concerns about deaths being misreported by Coronavirus because of either testing or standards for how they are characterized?" the reporter asked Birx.

"If someone dies with COVID-19, we are counting that as a COVID-19 death," Birx said.

Dr. Jensen let the cat out of the bag.

Now he is being punished for revealing the truth to the American people.

Minnesota Democrats including state Attorney General Keith Ellison are going after Dr. Jensen. They want to take away his medical license — for speaking the truth!

This is complete tyranny. Of course, the mainstream media will ignore this story too.

5.1

Pfizer Must Compensate Those Harmed By Its COVID Vaccines, Cardiologist Says

January 21, 2023

"The fines should be so large that pharmaceutical companies risk going bankrupt and senior executives should go to jail if they knew their medical intervention was going to cause harm," says Dr. Aseem Malhotra.

Pfizer should pay compensation to all recipients who've been injured by its experimental COVID mRNA injection, says a UK cardiologist.

Dr. Aseem Malhotra joined "The Ingraham Angle" on Friday to react to Pfizer CEO Albert Bourla **dodging tough questions by reporters** about his company's COVID vaccine during the World Economic Forum's annual Davos summit.

"We're dealing with one of the poorest efficacious pharmacological interventions with the worst safety profile which has become the most profitable in the history of medicine," Dr. Malhotra told host Laura Ingraham.

BREAKING:

Pfizer should compensate the vaccine injured says Cardiologist

'The fines should be so large that pharmaceutical companies risk going bankrupt and senior executives should go to jail if they knew their medical intervention was going to cause harm' pic.twitter.com/pTurhqtDhO

— Dr Aseem Malhotra (@DrAseemMalhotra) **January 21, 2023**

"And that really sums up a system failure behind all of why we got to this stage. I've described this before as probably the greatest miscarriage of medical science that we've witnessed in our lifetime."

Malhotra went on to explain how the most "egregious" aspect is the collapse of government and medical safety standards.

"These pharmaceutical companies have a legal obligation to produce profit for their shareholders. They do not have a legal requirement to give you the best treatment," he said. "The real scandals are that regulators failed to prevent misconduct by industry. And that doctors, academic institutions and medical journals collude with industry for financial gain."

To prevent this kind of medical malpractice from happening again, Pfizer should compensate those injured by its experimental COVID injection, he argued.

"The fines should be so large that pharmaceutical companies risk going bankrupt and senior executives should go to jail if they knew their medical intervention was going to cause harm," he said.

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"There's a lot of people who are vaccine-injured. I'm having to look after them and deal with them as well. It's really awful how they've been gaslighted."

"And I think one of the things the Pfizer CEO could do maybe to redeem himself is to say, 'We're going to give a considerable amount of our profits to helping treat the vaccine-injured and do research into vaccine injuries,'" he added.

Ingraham agreed, noting she personally knows people who are "hurting" as a result of taking the jab.

In 2020, the U.S. granted Pfizer and Moderna blanket **immunity** from liability of any injuries resulting from their COVID mRNA shots despite them being rubber-stamped with Emergency Use Authorization rather than approved after extensive clinical trials.

6.1

Massive 'Pfizer Files' Thread Exposing Big Pharma Corruption Goes Viral

by Kelen McBreen

January 4, 2023

From billions of dollars in settlements to illegally paying off medical professionals, Big Pharma fraud is rampant
Meanwhile, the establishment will not allow any questioning of the experimental Covid 'vaccines'

Journalist Kanekoa The Great posted an epic thread on Twitter Tuesday exposing the corrupt pharmaceutical company Pfizer as an untrustworthy and dangerous corporation.

The independent journalist began the post by writing, "Pfizer has habitually engaged in illegal and corrupt marketing practices, bribed physicians, & suppressed adverse trial results. This is no secret, yet this fact continues to be brushed under the rug by politicians & the media."

2/ Pfizer's CEO @AlbertBourla claimed during a November 2021 interview that a group of "medical professionals" intentionally circulating "misinformation" critical of the Pfizer vaccine were "criminals."

The Pfizer CEO must have forgotten the history of his own company. pic.twitter.com/d9ZSJECM3T

— kanekoa.substack.com (@KanekoaTheGreat) January 3, 2023

Providing proof of the accusations, Kanekoa started with links showing Pfizer paid \$200 million in a 1994 settlement suit and that the company was responsible for the deaths of eleven Nigerian children who took part in an experimental drug test.

4/ In 1996, Pfizer gave an experimental drug to 200 Nigerian children without informing their parents that an approved cure existed or that their children were subjects of a medical experiment.

Eleven children died.

Others suffered brain damage, organ failure, or paralysis. pic.twitter.com/zQ3I0SUqLr

— kanekoa.substack.com (@KanekoaTheGreat) January 3, 2023

In another story related to experimenting on Nigerians, Pfizer was accused of using children as guinea pigs and violating the Nuremberg Code, but the case was dismissed.

Eventually, the Nigerian government got involved and sued Pfizer for \$7 billion for "carrying out illegal trials" that "killed or disabled children."

6/ In 2007, the Nigerian government sued Pfizer for \$7 billion and accused the company of "carrying out illegal trials" that "killed or disabled children."

Nigeria claimed Pfizer did not inform local health authorities or parents that the children were part of an experiment. pic.twitter.com/TNV9juOYMi

— kanekoa.substack.com (@KanekoaTheGreat) January 3, 2023

That lawsuit was also dropped, but only after the Nigerian Attorney General was allegedly blackmailed by hired goons of the pharma giant.

WikiLeaks files show the company hired private investigators to dig up dirt on the attorney general to be used in the blackmail plot.

8/ The leaked cables claimed Pfizer passed "a series of damaging articles" to the media that accused the Attorney General of corruption and warned him that more negative articles would come out if he didn't drop the case.

Nigeria dropped the case in 2009. pic.twitter.com/uycfW9rWop

— kanekoa.substack.com (@KanekoaTheGreat) **January 3, 2023**

Pfizer paid another \$49 million settlement in 2002 for overcharging customers and in 2008, the company manipulated studies for its benefit.

10/ In 2008, the NYT published an article entitled, "Experts Conclude Pfizer Manipulated Studies."

Pfizer delayed the publication of negative studies, spun negative data more positively, and suppressed negative findings to promote Neurontin. <https://t.co/tMwEf2311j> pic.twitter.com/IFz7Mx9FQy

— kanekoa.substack.com (@KanekoaTheGreat) **January 3, 2023**

In 2009, a \$750 million settlement was agreed upon after 63 people died from a Pfizer drug called Rezulin.

12/ In 2009, Pfizer paid \$750M to settle 35,000 claims that its drug, Rezulin, was responsible for 63 deaths and dozens of liver failures.

The FDA did not remove Rezulin from the market until three years after the UK had, despite a mounting death toll. <https://t.co/0ZJ0sIYiLE> pic.twitter.com/PXDyaFgRnZ

— kanekoa.substack.com (@KanekoaTheGreat) **January 3, 2023**

In what was the largest healthcare fraud settlement in history, Pfizer was fined \$2.3 billion by the Justice Department for paying off doctors and illegally promoting several of its drugs.

Even CNN's Anderson Cooper asked at the time, "If Pfizer is too big to fail and even the biggest fine in history is just a few months' profits, then what's going to stop it from illegally promoting other drugs?"

15/ CNN's Anderson Cooper: If Pfizer is too big to fail and even the biggest fine in history is just a few months' profits, then what's going to stop it from illegally promoting other drugs?

Critics say nothing.

They say it's the cost of doing business. pic.twitter.com/v6KjO9h9Z2

— kanekoa.substack.com (@KanekoaTheGreat) **January 3, 2023**

In 2010, Pfizer was caught illegally selling and marketing another drug, violating the RICO act and costing \$142 million.

The company was also sued and fined by the SEC \$60 million for illegally bribing thousands of doctors and medical professionals around the world.

17/ In 2010, Pfizer admitted that it paid \$20 million to 4,500 doctors and other medical professionals for consulting and speaking on its behalf during the last six months of 2009.

The disclosure was required due to a settlement agreement for the illegal promotion of drugs. pic.twitter.com/748ywp2m7o

6.2

— kanekoa.substack.com (@KanekoaTheGreat) January 3, 2023

19/ In 2012, the SEC charged Pfizer with violating the Foreign Corrupt Practices Act for bribing foreign healthcare professionals in Bulgaria, China, Croatia, the Czech Republic, Italy, Kazakhstan, Russia, and Serbia.

Pfizer settled for \$60 million. <https://t.co/jgMCJ03DOq> <pic.twitter.com/5Qc95eVnrP>

— kanekoa.substack.com (@KanekoaTheGreat) January 3, 2023

A 2012 lawsuit cost the company another \$1.2 billion and revealed it failed to acknowledge the risk of breast cancer linked to its drug Prempro.

Illegally promoting the drug Protonix cost the business \$839 million from 2012-2016.

21/ In 2012, Pfizer paid \$55 million to settle criminal charges for illegally promoting its proton pump inhibitor Protonix.

In 2016, Pfizer paid \$784 million to settle a medicare fraud case for its promotion of Protonix. <https://t.co/ii0LL7VqFQ> <pic.twitter.com/4HuQaorh0V>

— kanekoa.substack.com (@KanekoaTheGreat) January 3, 2023

Kanekoa wrote, "In 2013, Pfizer paid \$273 million to settle claims by over 2000 people that its drug, Chantix, caused suicidal thoughts and severe psychological disorders."

23/ In 2013, Pfizer paid \$273 million to settle claims by over 2000 people that its drug, Chantix, caused suicidal thoughts and severe psychological disorders. <https://t.co/QPogEalJAh> <pic.twitter.com/3eAqkOyFsP>

— kanekoa.substack.com (@KanekoaTheGreat) January 3, 2023

25/ Pfizer has habitually engaged in illegal and corrupt marketing practices, bribed physicians, and suppressed adverse trial results.

This is no secret, yet big government, big tech, and big media banned scientific criticism of Pfizer's covid-19 vaccines. <pic.twitter.com/6msVxeGTzb>

— kanekoa.substack.com (@KanekoaTheGreat) January 3, 2023

Continuing, the Twitter thread pointed out mRNA inventor Dr. Robert Malone was kicked off Twitter for posting a video exposing Pfizer's weak COVID-19 "vaccine" clinical trials.

27/ <@RWMaloneMD> tells <@joerogan> that he was banned for sharing:

"...a fantastic video... by the Covid Care Alliance group that summarizes all the malfeasance, and data

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manipulation, and misinterpretation of the Pfizer vaccines, and their clinical trials." pic.twitter.com/966NeZWwC7

— kanekoa.substack.com (@KanekoaTheGreat) **January 3, 2023**

29/ The video is a fact-based scientific critique of Pfizer's covid-19 vaccine clinical trials.

Considering Pfizer's history of corruption, scientists, doctors, and journalists should not have been banned from social media for asking these questions. <https://t.co/9ybs8KdVZC>

— kanekoa.substack.com (@KanekoaTheGreat) **January 3, 2023**

The group Dr. Malone cited alleged the vast majority of individuals authoring reports on Pfizer products had conflicts of interest as they'd been employed by or bribed by the company.

31/ Pfizer unblinded the trial after two months ruining long-term safety data & did not track biomarkers before & after vaccination:

- D-dimer for clotting
- C-reactive protein for inflammation
- Troponins for cardiac damage
- Blood oxygen for hypoxia
- Amyloid for Alzheimer's pic.twitter.com/rCBHeFT97

— kanekoa.substack.com (@KanekoaTheGreat) **January 3, 2023**

The data also shows Pfizer's 6-month report admitted there was an increase in all-cause illnesses in recipients of the jab with a whopping 300% increase in adverse events from the shot.

33/ [@CCCAAlliance](https://twitter.com/CCCAAlliance): Pfizer's 6-month report shows a 300% increase in related adverse events, a 75% increase in severe adverse events, and a 10% increase in serious adverse events for the vaccinated group versus the placebo.

Why is there an increase in all-cause illnesses? pic.twitter.com/XiwVEgrk29

— kanekoa.substack.com (@KanekoaTheGreat) **January 3, 2023**

The 6-month report even showed more people died from the vaccinated group than the placebo group!

In fact, one of the 1,131 children who took part in Pfizer's clinical trial developed paralysis and a neurological disorder in response to the shot.

35/ Maddie de Garay was 1 of 1,131 children in Pfizer's clinical trial for children aged 12-15.

Pfizer officially recorded Maddie's paralysis and neurological disorder as "abdominal pain" when reporting clinical trial results to the FDA. pic.twitter.com/cMLPVAoyrv

— kanekoa.substack.com (@KanekoaTheGreat) **January 3, 2023**

Another person who tried to speak out against Pfizer's falsifying of data was fired for daring to report the corporation's wrongdoings.

6.4

Later, Kanekoa pointed out pharmaceutical company ads accounted for 75% of ads on television in 2020 with Pfizer spending \$2 billion on ads in 2021.

37/ In 2020, the pharmaceutical industry spent \$4.5 billion on TV advertising in the United States, accounting for 75% of all ads.

In 2021, Pfizer alone spent \$2 billion on advertising across print, digital, and TV.

Big Pharma buys positive media coverage. pic.twitter.com/sqywOzd80t

— kanekoa.substack.com (@KanekoaTheGreat) **January 3, 2023**

The revolving door between Big Pharma and the government was also focused on in the thread, with 9 out of 10 FDA commissioners between 2006 and 2019 going on to work at pharmaceutical companies.

39/ 9 out of 10 of the FDA's commissioners between 2006 and 2019 went on to work for the pharmaceutical companies they were in charge of regulating.

The BMJ found that 65% of the FDA's drug review budget comes directly from the pharmaceutical industry. <https://t.co/TbMX7cNzdR> pic.twitter.com/EkfNITYliu

— kanekoa.substack.com (@KanekoaTheGreat) **January 3, 2023**

Concluding the thread, the independent journalist thanked Elon Musk for allowing him to question the "integrity, safety, and efficacy" of the Covid jabs on Twitter while the rest of the establishment has cracked down on all criticisms of the experimental technology.

41/ So while Pfizer's CEO says "medical professionals" intentionally circulating "misinformation" are "criminals."

The reality is there are legitimate integrity, safety, and efficacy questions about their covid-19 vaccines.

And thank you, [@elonmusk](https://twitter.com/elonmusk), for allowing us to ask them. pic.twitter.com/iFoivVB5xn

— kanekoa.substack.com (@KanekoaTheGreat) **January 3, 2023**

7.1

Pfizer Tried to 'Bully' India To Accept Experimental Jabs – Minister

by RT

January 21, 2023

New Delhi never approved the company's jab as the US drugmaker apparently wanted protection from lawsuits over adverse effects.

US drugmaker Pfizer attempted to “bully the Indian government” into granting it indemnity from legal action over its Covid-19 vaccine, Electronics and Technology Minister Rajeev Chandrasekhar has claimed. The vaccine shot was ultimately never approved in India.

“Just to remind all Indians, that Pfizer tried to bully the government of India into accepting conditions of indemnity,” Chandrasekhar tweeted on Friday. The minister then accused three prominent opposition leaders of “pushing foreign vaccines during Covid.”

Chandreaskar's tweet featured a video of Pfizer CEO Albert Bourla being ambushed by a reporter at the World Economic Forum's yearly gathering in the Swiss resort of Davos this week. Asked when he knew that his company's vaccines “*didn't stop transmission*” of the coronavirus, Bourla refused to answer.

Just to remind all Indians, that Pfizer tried to bully Govt of India into accepting conditions of indemnity

And Cong trio of Rahul, Chidamabaram n Jairam Ramesh kept pushing case of foreign vaccines during Covid 🤔🤔🤔 <https://t.co/nT5LHI07hc>

— Rajeev Chandrasekhar IN (@Rajeev_GoI) **January 20, 2023**

Bourla claimed in 2021 that his product was “*100% effective in preventing Covid-19 cases,*” despite Pfizer **never testing** whether it would stop transmission or not. However, Pfizer was not required to prove whether its shot stopped transmission in order to secure emergency approval in the US and EU, while some studies showed that it reduced transmission of early Covid-19 variants.

7.2

India refused to grant any vaccine manufacturer protection from claims linked to vaccine side effects, with government sources arguing that accepting the indemnity clause would leave the government itself, rather than the manufacturer, liable in the event of lawsuits. Accordingly, Pfizer and Moderna both refused to ship their mRNA-based shots to India.

India initially approved a locally-manufactured variant of the Oxford-AstraZeneca vaccine, another domestically-manufactured shot called Covaxin, and Russia's Sputnik V. Moderna's product was eventually given approval, as was Johnson & Johnson's and a number of other locally-made vaccines.

Pfizer enjoys indemnity in the US under a series of pro-industry laws, and in the EU under confidential contracts signed by the pharma company and member states. The UK also granted Pfizer protection from legal action, changing the law to shield both the firm and healthcare staff administering the jab.

In the US, the Centers for Disease Control and Prevention (CDC) **announced** last week that it would investigate a potential link between Pfizer's Covid-19 vaccine and strokes among elderly people, but insisted it "*is very unlikely*" that there is a "*true clinical risk*." Pfizer's shot has also been linked to an **increased risk** of cardiac arrest, particularly in young males.

Rational harm-benefit assessments by age group are required for continued COVID-19 vaccination

To the editor,

We read with interest the letter by Dr. Gül and Dr. Öztürk,¹ which comments about the previous letter by Dr. Polykretis.² The letter by Dr. Polykretis aimed to underline the differences between the genetic vaccines against COVID-19 and vaccines based on inactivated or attenuated viruses in terms of immunization mechanism. Moreover, and most importantly, it sought to emphasize the necessity of biodistribution studies in front of the numerous publications reporting on a variety of serious adverse events among vaccinees.² Considering that some pharmaceutical companies, such as Pfizer/BioNTech, had 'to move at the speed of science, to really understand what is taking place in the market' to release the vaccines (as declared later on by Janine Small, President of International Developed Markets, to the European Parliament on Monday, October 10th, 2022), there is nothing of scientifically despicable or misleading in seeking for the collection of more accurate data about biodistribution.

Dr. Gül and Dr. Öztürk accuse the letter by Dr. Polykretis of being 'misinforming' and of containing some 'basic errors', arguing on the definitions of genetic vaccines and autoimmunity. We would like to address on both cases. Regarding the definition of genetic vaccines, the letter by Dr. Polykretis is not misleading, as scientific literature reports that: 'gene vaccines are a new approach to immunization and immunotherapy in which, rather than a live or inactivated organism (or a subunit thereof), one or more genes that encode proteins of the pathogen are delivered'.³ As concerns the term autoimmunity, the Merriam-Webster medical dictionary it defines it as: 'a condition in which the body produces an immune response against its own tissue constituents'. Therefore, it is not misinforming or erroneous to define autoimmune reaction the response of the immune system against human cells that intake the lipid nanoparticles (LNPs) and translate the spike protein (in case of the mRNA vaccines), or that get infected by the adenovirus and express and translate the spike protein (in case of the adenovirus-based vaccines). Regarding the fact that even the 'traditional vaccines' cause the immune system

to respond by attacking self-cells during the immunization process, there are some fundamental aspects that should be underlined: (i) The vaccines based on inactivated or killed viruses involve principally presentation to antigen presenting cells (APCs) including macrophages, monocytes, B cells and dendritic cells that phagocytose the virus particles and present the viral antigens to CD4⁺ T-cells. The aforementioned classes of cells carry out this specific role within the organism, making them somewhat expendable, as there is a continuous turnover of such cells. (ii) The attenuated viruses have a reduced virulence and thus, the resulting infection involves a minor number of human cells. Instead, several sources of histopathological evidence demonstrate that the genetic vaccines exhibit an off-target distribution in tissues, which are terminally differentiated and subject to symptomatic injury. These include the heart and brain, which may sustain a massive production of spike protein which elicits a strong autoimmunological inflammatory response.^{4,5} The above mentioned histopathological findings confirm exactly the mechanism previously theorized by Dr. Polykretis: "For instance, if the mRNA contained in the LNPs would get internalized by cardiac myocytes, and such cells would produce the spike protein, the resulting inflammation would likely lead to the necrosis of the myocardium, with an extent proportional to the number of involved cells".²

An independent secondary analysis of serious adverse events reported in phase III clinical trials of Pfizer and Moderna, found that the mRNA vaccines combined were associated with an excess risk of serious adverse events of 1 per 800 vaccinated individuals.⁶ Nevertheless, indiscriminate COVID-19 vaccination has been expanded to include age groups and naturally immune with minimal chance of suffering major complications due to COVID-19. In these groups COVID-19 vaccination is not clinically indicated nor medically necessary. According to a large-scale risk-benefit analysis, between 31 207 and 42 836 young adults aged 18-29 years would need to receive a third mRNA vaccine dose to prevent one COVID-19 hospitalization over a course of six months.⁷

0-14 years

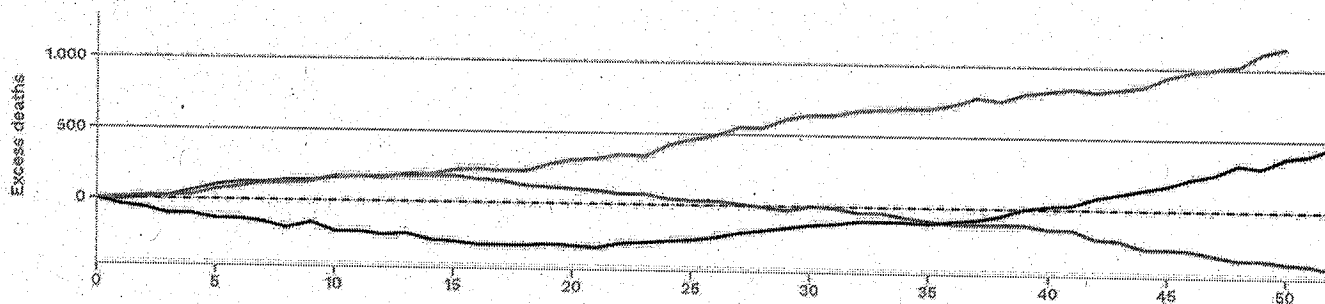


FIGURE 1 Graph showing the excess mortality in the age group 0-14 until week 2022-51, generated with data from 27 participating European countries (EuroMOMO 2022).

The authors estimate that at least 18.5 serious adverse events could occur for every COVID-19 hospitalization prevented. From January 2021 to the time of writing, 1598 athletes suffered cardiac arrest, 1101 of which with deadly outcome.⁸ Notably, in a 38-years timespan (1966-2004), 1101 athletes under the age of 35 died (~29/years) due to various heart-related conditions, 50% of whom had congenital anatomical heart disease and cardiomyopathies and 10% had atherosclerotic heart disease with early onset.⁹ According to a study done on 301 teenagers between the ages of 13 and 18 who had received two doses of the Pfizer/BioNTech vaccine, 29.24% of participants experienced cardiovascular complications such tachycardia, palpitations and 2.33% suffered myopericarditis.¹⁰ It is noteworthy, that no statistically significant increase in the incidence of myocarditis or pericarditis was observed in un-vaccinated subjects after SARS-CoV-2 infection, in a large population study.¹¹ Since the end of 2021 and throughout 2022, young age excess mortality has substantially increased in many European countries (Figure 1), in concert with the vaccine program.¹²

In conclusion we thank our colleagues for advancing the discourse on the extremely concerning safety data after COVID-19 vaccination, which prompt us to emphasize again and more firmly the need of biodistribution studies as well as of rational harm-benefit assessments by age group.

CONFLICT OF INTEREST

The author declares that he has no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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9.1

Japan Declares It Will Handle COVID-19 Like a Seasonal Flu

January 21, 2023 by Jim Hoft

Prime Minister Fumio Kishida of Japan announced on Friday that he had instructed his cabinet to reclassify COVID-19, placing it in the same category as seasonal flu, rubella, and chickenpox in spring.

"Today, we held a press conference on the discussion on revising the new coronavirus infectious disease into category 5," Prime Minister Fumio Kishida said Friday.

"In order to further advance the efforts of 'living with Corona' and restore Japan to a state of normalcy, we will transition the various policies and measures to date in phases," Kishida said.

In Japan, Covid-19 is currently listed as "Category 2: Very Dangerous" together with tuberculosis, avian flu, and diphtheria.

"COVID-19 is currently classified as "equivalent to category 2," requiring that hospitals and clinics report the names of infected patients and the details of their diagnosis before making recommendations regarding hospitalization. The soaring numbers of people infected in Japan's seventh coronavirus wave have increased the administrative burden on the medical front line, leading to regional medical associations and the National Governors' Association to repeatedly call for a review of the system," [Nippon.com](https://www.nippon.com) reported.

The outlet added that experts have proposed that COVID-19 be reclassified as a "Category 5: Diseases for which outbreaks and spread should be prevented," similar to seasonal flu, which would restrict reporting to only those at high risk of developing severe symptoms or restrict data collection to only patients diagnosed at designated medical facilities.

Major Required Actions by Disease Category

	Category 2	COVID-19	Category 5
Public funding for medical treatment	✓	✓	✗
Record all those infected	✓	✓	✗
Make recommendations on hospitalization	✓	✓	✗
Restrictions on going to work	✓	✓	✗
Measures applicable to asymptomatic people	✗	✓	✗

Source: [Nippon.com](https://www.nippon.com)

9.2

More from the **Office** of the Prime Minister of Japan:

In addition, about vaccine, we will carry out based on Preventive Vaccinations Law regardless of review of typology. First of all, I would like to ask as many people as possible to get vaccinated against the vaccines that are currently being implemented. We are also considering how future vaccinations should be, and we will reach a conclusion. Minister of Health, Labor and Welfare and Minister Goto will explain the details again. This is the result of what was confirmed at the previous meeting.

(Recognition of the current situation of new coronavirus infections and the impact of the revision to category 5 on people's lives)

First, the minister in charge will explain the details. Regarding the eighth wave, as I just said, we are currently doing our utmost to overcome this eighth wave, and we will continue to do our utmost. On top of that, we have been moving forward with the transition to with COVID-19, but in order to restore Japan to normal times, we should think about specific responses, the responses I mentioned earlier. In principle, we have confirmed that we will review the classification of the Infectious Diseases Control Law this spring and proceed with coordination to implement this. Regarding the sense of schedule, we will proceed with things with the sense of schedule that I just mentioned. I would like Minister Kato and Minister Goto to explain the details in the future.

(Regarding the timing of revision to Category 5)

I just confirmed that the timing is spring. As for the specific date, it is also related to preparations at the site, so I would like to continue making adjustments and confirm the date as soon as possible. From now on, the infectious disease subcommittee will also be held for next week. I would like to check it out.

(Reasons for making decisions at this time)

It is basically as I mentioned earlier. However, this discussion has been going on since last year, and there have been discussions that a decision should be made as soon as possible. And last week, volunteer experts also showed us their thoughts on the position of the new corona infectious disease law. Based on this, I confirmed today the schedule for revising the classification under the Infectious Diseases Act in principle this spring.

Physical interventions to interrupt or reduce the spread of respiratory viruses

Tom Jefferson, Liz Dooley, Eliana Ferroni, Lubna A Al-Ansary, Mieke L van Driel, Ghada A Bawazeer, Mark A Jones, Tammy C Hoffmann, Justin Clark, Elaine M Beller, Paul P Glasziou, John M Conly

Version published: 30 January 2023

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Abstract

Background

Viral epidemics or pandemics of acute respiratory infections (ARIs) pose a global threat. Examples are influenza (H1N1) caused by the H1N1pdm09 virus in 2009, severe acute respiratory syndrome (SARS) in 2003, and coronavirus disease 2019 (COVID-19) caused by SARS-CoV-2 in 2019. Antiviral drugs and vaccines may be insufficient to prevent their spread. This is an update of a Cochrane Review last published in 2020. We include results from studies from the current COVID-19 pandemic.

Objectives

To assess the effectiveness of physical interventions to interrupt or reduce the spread of acute respiratory viruses.

Search methods

We searched CENTRAL, PubMed, Embase, CINAHL, and two trials registers in October 2022, with backwards and forwards citation analysis on the new studies.

Selection criteria

We included randomised controlled trials (RCTs) and cluster-RCTs investigating physical interventions (screening at entry ports, isolation, quarantine, physical distancing, personal protection, hand hygiene, face masks, glasses, and gargling) to prevent respiratory virus transmission.

Data collection and analysis

We used standard Cochrane methodological procedures.

Main results

We included 11 new RCTs and cluster-RCTs (610,872 participants) in this update, bringing the total number of RCTs to 78. Six of the new trials were conducted during the COVID-19 pandemic; two from Mexico, and one each from Denmark, Bangladesh, England, and Norway. We identified four ongoing studies, of which one is completed, but unreported, evaluating masks concurrent with the COVID-19 pandemic.

Many studies were conducted during non-epidemic influenza periods. Several were conducted during the 2009 H1N1 influenza pandemic, and others in epidemic influenza seasons up to 2016. Therefore, many studies were conducted in the context of lower respiratory viral circulation and transmission compared to COVID-19. The included studies were conducted in heterogeneous settings, ranging from suburban schools to hospital wards in high-income countries; crowded inner city settings in low-income countries; and an immigrant neighbourhood in a high-income country. Adherence with interventions was low in many studies.

The risk of bias for the RCTs and cluster-RCTs was mostly high or unclear.

Medical/surgical masks compared to no masks

We included 12 trials (10 cluster-RCTs) comparing medical/surgical masks versus no masks to prevent the spread of viral respiratory illness (two trials with healthcare workers and 10 in the community). Wearing masks in the community probably makes little or no difference to the outcome of influenza-like illness (ILI)/COVID-19 like illness compared to not wearing masks (risk ratio (RR) 0.95, 95% confidence interval (CI) 0.84 to 1.09; 9 trials, 276,917 participants; moderate-certainty evidence). Wearing masks in the community probably makes little or no difference to the outcome of laboratory-confirmed influenza/SARS-CoV-2 compared to not wearing masks (RR 1.01, 95% CI 0.72 to 1.42; 6 trials, 13,919 participants; moderate-certainty evidence). Harms were rarely measured and poorly reported (very low-certainty evidence).

N95/P2 respirators compared to medical/surgical masks

We pooled trials comparing N95/P2 respirators with medical/surgical masks (four in healthcare settings and one in a household setting). We are very uncertain on the effects of N95/P2 respirators compared with medical/surgical masks on the outcome of

10.2

clinical respiratory illness (RR 0.70, 95% CI 0.45 to 1.10; 3 trials, 7779 participants; very low-certainty evidence). N95/P2 respirators compared with medical/surgical masks may be effective for ILI (RR 0.82, 95% CI 0.66 to 1.03; 5 trials, 8407 participants; low-certainty evidence). Evidence is limited by imprecision and heterogeneity for these subjective outcomes. The use of a N95/P2 respirators compared to medical/surgical masks probably makes little or no difference for the objective and more precise outcome of laboratory-confirmed influenza infection (RR 1.10, 95% CI 0.90 to 1.34; 5 trials, 8407 participants; moderate-certainty evidence). Restricting pooling to healthcare workers made no difference to the overall findings. Harms were poorly measured and reported, but discomfort wearing medical/surgical masks or N95/P2 respirators was mentioned in several studies (very low-certainty evidence).

One previously reported ongoing RCT has now been published and observed that medical/surgical masks were non-inferior to N95 respirators in a large study of 1009 healthcare workers in four countries providing direct care to COVID-19 patients.

Hand hygiene compared to control

Nineteen trials compared hand hygiene interventions with controls with sufficient data to include in meta-analyses. Settings included schools, childcare centres and homes. Comparing hand hygiene interventions with controls (i.e. no intervention), there was a 14% relative reduction in the number of people with ARIs in the hand hygiene group (RR 0.86, 95% CI 0.81 to 0.90; 9 trials, 52,105 participants; moderate-certainty evidence), suggesting a probable benefit. In absolute terms this benefit would result in a reduction from 380 events per 1000 people to 327 per 1000 people (95% CI 308 to 342). When considering the more strictly defined outcomes of ILI and laboratory-confirmed influenza, the estimates of effect for ILI (RR 0.94, 95% CI 0.81 to 1.09; 11 trials, 34,503 participants; low-certainty evidence), and laboratory-confirmed influenza (RR 0.91, 95% CI 0.63 to 1.30; 8 trials, 8332 participants; low-certainty evidence), suggest the intervention made little or no difference. We pooled 19 trials (71,210 participants) for the composite outcome of ARI or ILI or influenza, with each study only contributing once and the most comprehensive outcome reported. Pooled data showed that hand hygiene may be beneficial with an 11% relative reduction of respiratory illness (RR 0.89, 95% CI 0.83 to 0.94; low-certainty evidence), but with high heterogeneity. In absolute terms this benefit would result in a reduction from 200 events per 1000 people to 178 per 1000 people (95% CI 166 to 188). Few trials measured and reported harms (very low-certainty evidence).

We found no RCTs on gowns and gloves, face shields, or screening at entry ports.

Authors' conclusions

The high risk of bias in the trials, variation in outcome measurement, and relatively low adherence with the interventions during the studies hampers drawing firm conclusions. There were additional RCTs during the pandemic related to physical interventions but a relative paucity given the importance of the question of masking and its relative effectiveness and the concomitant measures of mask adherence which would be highly relevant to the measurement of effectiveness, especially in the elderly and in young children.

There is uncertainty about the effects of face masks. The low to moderate certainty of evidence means our confidence in the effect estimate is limited, and that the true effect may be different from the observed estimate of the effect. The pooled results of RCTs did not show a clear reduction in respiratory viral infection with the use of medical/surgical masks. There were no clear differences between the use of medical/surgical masks compared with N95/P2 respirators in healthcare workers when used in routine care to reduce respiratory viral infection. Hand hygiene is likely to modestly reduce the burden of respiratory illness, and although this effect was also present when ILI and laboratory-confirmed influenza were analysed separately, it was not found to be a significant difference for the latter two outcomes. Harms associated with physical interventions were under-investigated.

There is a need for large, well-designed RCTs addressing the effectiveness of many of these interventions in multiple settings and populations, as well as the impact of adherence on effectiveness, especially in those most at risk of ARIs.

11.1

Yale Professor Warns Pfizer Mutating COVID-19 Virus Would Be 'Act of Domestic Terrorism'

February 2, 2023

'We hope they're not doing that. But that's the concern,' says Yale epidemiology professor Dr. Harvey Risch. Pfizer exec claimed company was mutating viruses in video shot by undercover Project Veritas reporter.

A Yale professor of epidemiology has declared Pfizer's purported gain-of-function mutation of viruses, as claimed by one of the company's execs, would be an illegal endeavor.

The professor's analysis comes on the heels of a **bombshell Project Veritas report** showing Pfizer Director of Research and Development for Strategic Operations and mRNA Scientific Planning Jordon Trishton Walker admitting to an undercover Veritas journalist Pfizer was experimenting with mutating viruses in order to plan out future vaccines.

Speaking to **Just The News**, Yale Professor Emeritus and Senior Research Scientist in Epidemiology **Dr. Harvey Risch** suggested Pfizer would be committing "an act of domestic terrorism" if they in fact were involved in the research described.

Following **@Project Veritas**' bombshell undercover reporting last week, Dr. Harvey Risch shares his thoughts on if Pfizer used gain-of-function research in order to create a vaccine saying, "We hope they're not doing that, but that's the concern." **#JustTheNewsNoNoise @AmandaHead pic.twitter.com/hkHnNdne74**

— Real America's Voice (RAV) (@RealAmVoice) **February 2, 2023**

"If they were to do that, the vaccine would only be useful if the virus that they're inventing actually got out into the population," Risch told *Just the News*' "No Noise" show.

"That would be an act of domestic terrorism if that happened. So they're probably not doing that. We hope they're not doing that. But that's the concern."

Risch went on to say he does not believe Pfizer, which **released a statement** denying the allegations, has embarked on the research, and said he doubted Walker's claims.

"My first reaction is that in what he's talking about, he's an amateur and he doesn't really have depth of knowledge about the nature of how these viruses are propagated."

"There's a very, very deep extensive field of neurology, and he's talking about his superficial concepts of how he thinks the overall picture is organized for working with these viruses. But it is much more involved than that. There's a lot of other techniques that go into propagating these viruses."

27M **pic.twitter.com/xaRvID5qTo**

— Project Veritas (@Project_Veritas) **January 30, 2023**

Walker had told an undercover Veritas journalist, "One of the things we're exploring is like, why don't we just mutate it [COVID] ourselves so we could create — preemptively develop new vaccines, right? So, we have to do that. If we're gonna do that though, there's a risk of like, as you could imagine — no one wants to be having a pharma company mutating f**king viruses."

12.1

Dr. Deborah Birx Admits She Manipulated Data and Altered CDC Guidelines to Deceive President Trump

WND February 1, 2023

Dr. Deborah Birx, who served as the White House Coronavirus Response Coordinator under President, has admitted in a new book that she quietly called her own shots during the COVID-19 pandemic.

Birx confessed to manipulating data and quietly altering CDC guidance without the administration's knowledge or authorization.

In "Silent Invasion," she discusses how she "devised" a "strategic sleight-of-hand" method of reporting she described as "subterfuge."

"This wasn't the only bit of subterfuge I had to engage in," she writes.

WND reported:

Birx insisted, contrary to the White House and the CDC, that the asymptomatic spread of COVID-19 was significant.

She says that "eight months into the pandemic, many at both the White House and the CDC still refused to see that silent spread played a prominent role in viral spread and that it started with social gatherings, especially among the younger adults."

Birx opposed the advice of then-coronavirus adviser Dr. Scott Atlas to limit testing on the premise that asymptomatic transmission was minimal and not driving the pandemic.

She and then CDC Director Robert Redfield "agreed to quietly rewrite the guidance and post it to the CDC website."

"We would not seek approval. Because we were both quite busy, it might take a week or two, but we were committed to subverting the dangerous message that limiting testing was the right thing to do," she writes.

Birx recalls a phone call from White House Chief of Staff Mark Meadows: "What the hell do you think you're doing? You rewrote and posted the CDC testing stuff," said Meadows, according to Birx' account.

"Yes, I did, but –" Birx replied.

"There's no 'buts' here. You went over my head," Meadows said, according to Birx.

Birx, who appeared alongside Fauci and Trump during briefings, was instrumental in paving the way for destructive COVID policies such as testing, lockdowns, and masking.

"I devised a work-around for the governor's reports I was then writing," Birx admits in her new book.

"Instead of including those recommendations in the common bulleted list, I'd include them in the pandemic summary and state-specific recommendations in the governor's reports, where they wouldn't be so obvious."

Natural News provided additional details:

Birx goes on in her memoir to explain in detail how she would go through covid documents and manipulate the information in such a way as to make it minimally detectable by her superiors.

"After the heavily edited documents were returned to me, I'd reinsert what they had objected to, but place it in those different locations," she admits.

"I'd also reorder and restructure the bullet points so the most salient – the points the administration objected to most – no longer fell at the start of the bullet points. I shared these strategies with the three members of the data team also writing these reports."

12.2

Birx's Saturday and Sunday report-writing routine, she brags, "soon became: write, submit, revise, hide, resubmit," a strategic sleight-of-hand that she says "worked" as planned.

For a deeper dive into Deborah Birx's insubordination and deception of the Trump Administration, I highly recommend reading Michael P. Senger's recent substack article titled, "[Deborah Birx's 'Silent Invasion': a Guide to Destroying America From Within.](#)"

Alas, to that end, my book has been upstaged by the work of Deborah Birx, White House Coronavirus Response Coordinator, one of the "Trifecta" of three leading officials behind Covid lockdowns in the United States. Virtually every page of Birx's monstrosity of a book, *Silent Invasion*, reads like a how-to guide in subverting a democratic superpower from within, as could only be told through the personal account of someone who was on the front lines doing just that.

Notably, though Birx's memoir has earned relatively few reviews on Amazon, it's earned rave reviews from Chinese state media, a feat not shared even by far-more-popular pro-lockdown books such as those by Michael Lewis and Lawrence Wright.

The glowing response from Chinese state media should come as no surprise, however, because every sentence of Birx's book reads like it was written by the CCP itself. Chapter 1 opens with what she claims was her first impression of the virus.

I can still see the words splashed across my computer screen in the early morning hours of January 3. Though we were barely into 2020, I was stuck in an old routine, waking well before dawn and scanning news headlines online. On the BBC's site, one caught my attention: "China Pneumonia Outbreak: Mystery Virus Probed in Wuhan."

Indeed, as recounted in *Snake Oil*, that BBC article, which was posted at approximately 9:00 AM EST on January 3, 2020, was the first in a western news organization to discuss the outbreak of a new virus in Wuhan. Apparently, Birx was scanning British news headlines just as it appeared. What are the odds!

Birx wastes no time in telling us where she got her philosophy of disease mitigation, recalling how she immediately thought Chinese citizens "knew what had worked" against SARS-1: Masks and distancing.

Government officials and citizens across Asia knew both the pervasive fear and the personal response that had worked before to mitigate the loss of life and the economic damage wrought by SARS and MERS. **They wore masks. They decreased the frequency and size of social gatherings.** Crucially, based on their recent experience, the entire citizenry and local doctors were ringing alarm bells loudly and early. Lives were on the line—lots of them. They knew what had worked before, and they would do it again.

Birx spends countless pages tut-tutting the CCP for its "cover-up" of the virus (though Chinese state media apparently didn't mind, as they gushed about her book anyway), which is funny because then she tells us:

*On January 3, the same day the BBC piece ran, the Chinese government officially notified the United States of the outbreak. **Bob Redfield, the director of the Centers for Disease Control and Prevention, was contacted by his Chinese counterpart, George F. Gao.***

Note, January 3 is also the same day the hero whistleblower Li Wenliang was supposedly admonished by authorities for sending a WeChat message about a "cover-up" of the outbreak. So on the same day Li was "admonished," the head of China's CDC literally called US CDC Director Robert Redfield to share the exact same information Li supposedly shared.

13.1

HUGE: 101 Page Whistleblower Document Reveals The Biden Pentagon Suppressed Concerns About COVID Shot Side Effects And Many Soldiers Suffered Horrifying Injuries As A Result

By Cullen Linebarger February 14, 2023

In August of 2021, the Biden Regime decided to **mandate** the COVID vaccine for all U.S. soldiers, ignoring concerns regarding the side effects from the shot. A 101 page whistleblower document reveals not only did they act to suppress these worries, but their decision also had devastating health consequences for some of our heroes.

In August of 2022, The Gateway Pundit **reported** on the harrowing testimony from soldiers across all military branches who suffered significant injuries after being forced to take the COVID shot, which still remains under emergency use authorization (EUA). Most wished to remain anonymous due to fear of being permanently grounded if their injuries become known to their flight doctors.

The report, compiled by William P. Anton, was submitted to dozens of members of the Senate and House of Representatives. Yet the response from Congress, by and large, has been silence. Many of our representatives who proclaim to care about our military have known about these injuries for months and have done little to help.

These vaccine injuries included heart issues, vertigo, chronic fatigue, and shortness of breath. One service member even suffered from four strokes hours after her shot and is now unable to work due to ongoing balance issues. Another suffers from chest pains associated with pericarditis along with myalgia, ongoing neurological issues, and bilateral tinnitus.

Examples of Vaccine Injury ... by Jim Hoft

Last night, The Daily Caller **reported** they acquired the document, which was first provided to Congress in January 2022. The document is reportedly divided into four sections, with the first containing testimony from service members injured by the vaccine along with medical evidence.

The Pentagon also actively ignored exemption requests, even future ones from individuals injured from the shot.

13.2

The military members who spoke to the Daily Caller revealed there was a grand coverup to protect the Biden Regime from accountability. The Pentagon blew off soldiers who had suffered major side effects resulting from the vaccine and refused to report these injuries to VAERS, a **database** which detects possible adverse reactions associated with vaccines. VAERS is **co-sponsored** by the Centers for Disease Control (CDC).

Disclosing these injuries would have undermined the Regime narrative that the COVID vaccine was safe and effective for all individuals. This would have also embroiled Biden in a major scandal.

The Daily Caller **reported**:

The Department of Defense (DOD) mandated the vaccine for all servicemembers and marketed it as safe, but whistleblowers say their concerns about possible adverse responses went unheeded.

A spokesperson for the Defense Health Agency (DHA), which oversees medical services for the Army, Navy and Air Force, told the Daily Caller News Foundation DOD monitors a database where individuals can publicly report negative health events they believe may be related to the mandated COVID-19 vaccine.

However, many instances were never entered into the database, while military supervisors suppressed concerns about the possible side effects of the mandated shot and ignored exemption requests, according to a whistleblower document and servicemembers familiar with the situation.

The military members who spoke to the DCNF did so on condition of anonymity for fear of endangering their careers.

The DCNF obtained a 101-page whistleblower document provided to Congress in January 2022, detailing multiple cases of apparent vaccine injury. The document is divided into four sections, with the first containing seven first-person testimonies from injured members as well as medical documentation.

One Air Force reservist experienced at least one stroke that caused severe, career-ending eyesight dysfunction after her second dose of the Pfizer-

13.3

BioNTech vaccine, testimony and medical documentation shows. The member said she felt compelled to get vaccinated contrary to her sincere beliefs.

Another member, an Air Force fighter pilot instructor, was diagnosed with pericarditis (heart inflammation) and anaphylaxis (a severe allergic reaction) on Dec. 21, 2021 after rushing to the emergency room less than a day after receiving a single dose of the Johnson & Johnson vaccine in October, according to testimony and medical documentation.

The member was grounded for a month and said his medical superiors refused to grant future vaccine exemptions.

A Marine Corps aviation safety officer whose job involves reviewing incident reports said he noticed a "disturbing" increase in medical reports coinciding with the introduction of the COVID-19 virus, testimony and copies of the reports show. Incidents were not entered VAERS or monitored as vaccine reactions or injuries, the officer said.

"I have had some members tell me that the doctors they saw dismissed their symptoms," a civilian physician for the Air Force National Guard told the DCNF. "If symptoms weren't dismissed, they would either ignore the possibility of vax injury, or would outright tell people that there's no way the vax caused their symptoms."

14.1

"Fit and Healthy People are Dropping Down with Heart Issues" – Fed-Up Aussie Journalist Says He's 'Done with COVID Vaccines' on Live TV

By Jim Hoft Feb. 9, 2023

Popular Australian television presenter and journalist for the Nine Network, Karl Stefanovic, has shocked his viewers after he publicly criticized the latest recommendations for a fifth booster shot of the Covid vaccine on live TV.

On Wednesday, the Australian Technical Advisory Group on Immunization (**ATAGI**) released new recommendations for Covid-19 booster shots for all adult Australians. People above the age of 30 are recommended to get the fifth jab, while those between the ages of 18 and 29 should get the fourth jab.

During Wednesday's episode of Nine Network's breakfast program Today, fully vaccinated Stefanovic said that the shot could lead to "heart issues."

"As you know, I'm not a glowing ambassador for more than two shots. I've just decided that I've had covert a couple of times, and I'm done with the vaccines," Stefanovic said

Stefanovic was part of an advertisement for Australia's vaccination campaign.

Stefanovic is more worried of having complications if he has another dose of the COVID vaccine than getting the COVID.

"The other thing that I'm concerned about is that if I have another dose, that I may get complications. I've seen all this, all these reports on the internet about fit and healthy people just dropping down with heart issues, and it's still not obviously established yet whether or not the vaccine caused some of these heart issues. But that's a worry for me more so than getting COVID," he said.

15.1

...And Now, The Facebook Files: Emails Reveal The CDC's Role In Silencing COVID-19 Dissent

JAN 19, 2023

Authored by Robby Soave via Reason.com

The Centers for Disease Control and Prevention (CDC) played a direct role in policing permissible speech on social media throughout the COVID-19 pandemic. Confidential emails obtained by Reason show that Facebook moderators were in constant contact with the CDC, and routinely asked government health officials to vet claims relating to the virus, mitigation efforts such as masks, and vaccines.

For a broader analysis of the federal government's pandemic-era efforts to suppress free speech—and whether they violated the First Amendment—see Reason's March 2023 cover story on the ramifications of these emails. This article provides screenshots of the emails themselves.

After Elon Musk took control of Twitter, he permitted several independent journalists to peruse the company's previous communications with the FBI, the CDC, the White House, and government officials elsewhere. These disclosures, which have become known as the Twitter Files, reveal that government bureaucrats put substantial pressure on Twitter to restrict alleged misinformation relating to elections, Hunter Biden, and COVID-19. The Facebook Files, which were obtained by Reason as a result of the state of Missouri's lawsuit against the Biden administration, reveal that the CDC had substantial influence over what users were allowed to discuss on Meta's platforms: Facebook and Instagram.

The messages reveal an environment where the CDC kept tabs on Meta's moderation practices and regularly told the company what the agency wanted it to do.

For instance, in May 2021, CDC officials began routinely vetting claims about COVID-19 vaccines that had appeared on Facebook. The platform left it up to the federal government to determine which assertions were accurate.

From: [REDACTED]@fb.com
Sent: Wednesday, May 19, 2021, 4:13 PM
To: Crawford, Carol Y. (CDC/OD/OADC)
Subject: Re: Agenda Item for CDC call this week

Hi Carol,

To help with scooping on your end for Thursday, here are some of the COVID content items that Liz will be flagging for you/CDC team:

1. It is not safe for women on their period to take the COVID-19 vaccine
2. Being around people who were vaccinated with the COVID-19 vaccine causes side effects
a. Specifically, we have seen content claiming side effects such as menstrual cycle changes (already debunked by CDC) but also miscarriages, blood clotting, bleeding, bruising, general sickness
3. COVID-19 vaccines causing magnetism
a. Some of the content we are seeing (simultaneously claiming COVID vaccines contain microchips) would already be violating, but we are looking for input on the broader claim
4. Face masks contain harmful nano worms or harmful particles
5. COVID-19 vaccines cause Alzheimer's
6. COVID-19 vaccines cause Prion's disease
7. COVID-19 vaccines cause a cytokine storm
a. We already got WHO's input on this (inconclusive) so would be good to have CDC input
8. COVID-19 vaccines cause Bell's palsy
a. We already got WHO's input on this (inconclusive) so would be good to have CDC input
9. COVID-19 has 99.96% survival rate

(Reason)

* We are seeing content with rumours around mortality/survival rates, would be good to get CDC/WHO input

10. People who are receiving COVID-19 vaccines are subject to medical experiments
11. Is the claim "COVID-19 is man-made" false, unproven, unsupported by evidence, or true?
12. COVID-19 vaccines cause erectile dysfunction

Best,

(Reason)

Facebook's moderator notes that some of the above claims "would already be violating"—an implicit admission that the CDC's opinion on the other claims would be a deciding factor in whether the platform would restrict such content. Facebook was clearly a willing participant in this process; moderators repeatedly thanked the CDC for its "help in debunking."

Claims vetted by the CDC included whether "COVID-19 is man-made." The CDC told Facebook that it was "theoretically possible, but extremely unlikely."

From: [redacted]@fb.com
Sent: Monday, May 24, 2021 1:57 PM
To: Crawford, Carol Y. (CDC/OD/OADC) <[redacted]@cdc.gov>
Cc: [redacted]@fb.com; [redacted]@fb.com
Subject: RE: It was this list, sorry! FWA Agenda item for CDC call this week

Hi Carol,

Thanks so much again for you and team's help in debunking a few COVID-19 and vaccine misinformation claims for us. As follow up to our meeting, please see the list of claims below with notes from our conversation last Thursday morning.

If you could please confirm the conclusions I've noted below based on our discussion, that would be great, and I've also indicated the one your team noted follow up was needed before debunking (#12).

Please let me know if you have any questions.

Many thanks!

1. Is the claim "COVID-19 is man-made" false, unproven, unsupported by evidence, or true?
a. Inconclusive: It is most likely that this virus started within animals and jumped to humans, however, CDC director in her testimony yesterday said being man made was technically possible because we do not know the origin still. It being man made is theoretically possible, but extremely unlikely.

(Reason)

For months, it was Meta policy to prohibit users from asserting that the pandemic may have originated from a lab leak. The platform revised this policy around the same time that the above email exchange took place.

By July 2021, the CDC wasn't just evaluating which claims it thought were false, but whether they could "cause harm."

From: [redacted]@fb.com
Sent: Monday, July 26, 2021 12:58 PM
To: Crawford, Carol Y. (CDC/OD/OADC) <[redacted]@cdc.gov>
Cc: [redacted]@fb.com; [redacted]@fb.com
Subject: FB Misinformation Claims Help Debunking

Hi Carol, I hope you're well!

Our Misinformation Policy team has identified some claims that we were hoping your team could help us understand if they are false and can lead to harm? The three claims include:

1. Spike protein in COVID-19 vaccines is dangerous/cytotoxic
2. Guillain-Barre Syndrome (GBS) is a possible side effect of the COVID vaccine
3. Heart inflammation is a possible side effect of all COVID-19 vaccines (including non mRNA vaccines)

In addition, I was wondering if your team was aware of any global source of truth/database for vaccine adverse effects including possibly vaccine-related deaths?

Please let me know if you have any questions about the above, and thank you so much again for the CDC's help!

Best,

(Reason)

Then, in November, the Food and Drug Administration granted emergency authorization for children to receive Pfizer's COVID-19 vaccine. Meta proudly informed the CDC that it would remove false claims—"i.e. the COVID vaccine is not safe for kids"—from Facebook and Instagram. Meta also provided the CDC with a list of new claims about vaccines and asked whether the government thought they could "contribute to vaccine refusals."

15.2

From: [redacted]@fb.com
Sent: Tuesday, November 2, 2021 1:22 PM
To: Crawford, Carol Y. (CDC/OD/OADC) <[redacted]@cdc.gov>; Dempsey, Jay H. (CDC/OD/OADC) <[redacted]@cdc.gov>; Nordlund, Kristen (CDC/DDID/NCIRD/OD) <[redacted]@cdc.gov>; Gordon, Stephanie (CDC/OD/OADC) <[redacted]@cdc.gov>
Cc: [redacted]@fb.com
Subject: New Claims & Policy updates following EAU authorization for 5-11 year olds

Hi Carol, Kristen, and team!

Kristen, thanks so much for confirming the ability for the claims in question last week having the risk of causing vaccine refusals. And thank you all so much for your input over the last week on our many questions about vaccine misinformation relative to the EUA.

I wanted to share that as a result of our work together, when the FDA gave emergency use authorization to the Pfizer vaccine for children last week, we immediately updated our policies globally to remove additional false claims about the COVID-19 vaccine for children (e.g. "The COVID vaccine is not safe for kids"). We also launched a new feature on Instagram, where accounts that repeatedly post content that violates our policies on COVID-19 or vaccine misinformation may now lose the ability to be tagged or mentioned or may see pop-ups asking if they'd like to delete certain posts that may violate our policies.

As part of our regular monitoring of new claims about vaccines prevalent on our platform, we have identified a number of additional claims we would like to get your team's assessment on (apologies this is coming so quickly after the last round that were specific to the EUA's timing). Would it at all be possible to get input by Monday, November 8th?

For each of the following new claims, which we've recently identified on the platform, can you please tell us if:

1. The claim is false; and
2. If believed, could this claim contribute to vaccine refusals?

Please let me know if you have any questions or concerns, and otherwise thank you so much in advance for your help!

Best,
[redacted]

The CDC determined that this label applied to all such claims.

From: Crawford, Carol Y. (CDC/OD/OADC) <[redacted]@cdc.gov>
Date: Monday, November 8, 2021 at 11:25 AM
To: [redacted]@fb.com, Dempsey, Jay H. (CDC/OD/OADC) <[redacted]@cdc.gov>, Gordon, Stephanie (CDC/OD/OADC) <[redacted]@cdc.gov>
Cc: [redacted]@fb.com
Subject: RE: New Claims & Policy updates following EAU authorization for 5-11 year olds

We are still working on the "All Vaccines" section but here are some responses for COVID. Thanks!

It appears that any of these could potentially cause vaccine refusal.

(Reason)

It's important to consider the ramifications. Meta gave the CDC de facto power to police COVID-19 misinformation on the platforms; the CDC took the position that essentially any erroneous claim could contribute to vaccine hesitancy and cause social harm. This was a recipe for a vast silencing across Facebook and Instagram, at the federal government's implicit behest.

Meta frequently gave the CDC lists of pandemic-related topics that had gone viral, seeking guidance on how to handle them. And the CDC informed Meta "to be on the lookout" for misinformation stemming from specific alleged misconceptions.

15.3

From: [redacted]@fb.com
Sent: Tuesday, July 20, 2021 5:22 PM
To: Crawford, Carol Y. (CDC/OD/OADC) <[redacted]@cdc.gov>
Cc: [redacted]@fb.com; [redacted]@fb.com; [redacted]@fb.com; [redacted]@fb.com
Subject: Re: Crowd Tangle COVID-19 reports

Hi Carol,

Attached, please find the latest CrowdTangle content insights report for the period of June 30 – July 13 (attached). Here's the summary from this report, below:

Highly engaged COVID vaccine-related content overall [Slides 3-4] across Pages continues to include UNICEF's posts, as well as posts related to Pres. Biden's new strategy to increase vaccinations. In public groups, the posts with high interactions feature content debating COVID-19 vaccinations. In this report, we also explore highly engaging content within the following themes:

- **Reopening of Institutions:** Many of the highest engaged Page posts with keywords related to this theme share news of shifting public health policies allowing people to return to work, school, and religious services. Several posts focus on new guidelines for students returning back to school, with some expressing skepticism about vaccinating children. [Slides 5-6]
- **Olympics and COVID-19:** As the Tokyo Olympics draws closer, several high interaction Page posts on this discuss the recent spectator ban at the Olympics due to Tokyo's state of emergency from rising coronavirus cases. Also, many US publishers and pundits shared posts about US Olympic swimmer Michael Andrew refusing to be vaccinated ahead of Tokyo Olympics. [Slides 7-8]
- **Door-to-Door Vaccines:** The highest interaction Page posts for this topic convey concern from political opponents about the Biden administration's strategy to ramp up vaccination efforts in communities with low vaccination rates by going "door-to-door" to educate and encourage more Americans to get vaccinated. [Slides 9-10]

Let us know if you have any questions or specific keywords / topics you'd like for us to explore in the next report. As always, please do not share.

Thanks,

(Reason)

From: Crawford, Carol Y. (CDC/OD/OADC) [O-EXCHANGE/ASU-EXCHANGE ADMINISTRATIVE GROUP (FY19081828P01)/CN=RECIPIENTS/CN=71767796A4F047E18C84A50381348E-CRAWFORD, C]
Sent: 8/1/2021 4:11 PM
To: [redacted]@fb.com
Cc: [redacted] (CDC/OD/OADC) <[redacted]@cdc.gov>; [redacted] (CDC/OD/OADC) <[redacted]@cdc.gov>
Subject: BOLD: CDC Lab alert & misinformation
Attachments: IDCS Misinformation Examples.docx; Fact check for SM platforms.docx

[redacted] - BOLD for a small but growing area of misinfo. One of our Lab alerts [CDC 2019 Novel Coronavirus (2019-nCoV) Real-Time RT-PCR Diagnostic Panel] was misinterpreted and was shared via social media. The CDC issued a follow-up Laboratory Alert to provide further clarification and prevent additional confusion but we are still seeing some social media circulation. The CDC 2019 Novel Coronavirus (2019-nCoV) Real-Time RT-PCR Diagnostic Panel did not fall a full review and was not revoked by the FDA. I've attached some example Facebook posts and another document with the facts around the issue.

Let us know if you have any questions!

Carol

(Reason)

Meta also kept the CDC apprised of criticism of Anthony Fauci, the White House's COVID-19 advisor and head of the National Institute of Allergy and Infectious Diseases (NIAID). One email warned the CDC that Facebook users were mocking Fauci for changing his mind about masking and double-masking. The CDC replied that this information was "very helpful."

15.4

From: "Crawford, Carol Y. (CDC/OD/OADC)" <[redacted]@cdc.gov>
Date: Wednesday, February 17, 2021 at 5:37 AM
To: [redacted]@fb.com
Cc: [redacted]@fb.com, [redacted]@fb.com, [redacted]@fb.com
Subject: RE: Crowd Tangle COVID-19 reports

Thank you - very helpful!

From: [redacted]@fb.com
Sent: Tuesday, February 16, 2021 2:00 PM
To: Crawford, Carol Y. (CDC/OD/OADC) <[redacted]@cdc.gov>
Cc: [redacted]@fb.com; Lauren Balog Wright <[redacted]@fb.com>; [redacted]@fb.com
Subject: Re: Crowd Tangle COVID-19 reports

Hi Carol,

Attaching the latest CrowdTangle content insights report for the period of January 27-February 10 (attached). Here's the quick summary:

Top engaged COVID vaccine-related content overall across Pages and Groups (Slides 3-4) includes a number of posts from UNICEF, celebrations and condemnations of the successes and failure of the vaccine rollout, and some additional criticism/skepticism around the vaccine and its efficacy (primarily in Groups). However, posts falling into the following themes also garnered high engagement:

- Reports of deaths post-vaccination continue to garner high interactions from both Pages (largely news organizations) and Groups, where a few personal reports appear mixed in with news articles. (Slides 5-6)
- Double-masking, while not directly related to the vaccine, drew high engagement as new studies and recommendations around wearing two masks were shared by both Pages and Groups. Some high-interaction posts from Pages mocked the idea and Fauci's changing position on it, while in Groups criticism came in meme form. (Slides 7-8)

(Reason)

- Personal reports of vaccination continue as more people are vaccinated. On Pages, highly engaged posts tend to highlight the experiences of public figures or government officials, but more graphic experiences with side effects - some looking for reassurance - garnered high interactions in Groups. (Slides 9-10)

As always, please let us know if you have any questions or particular keywords/topics you'd like us to explore for the next report.

Thanks,
Kelly

(Reason)

If the tone of Meta's communications seems overly friendly, it's worth noting that staffers viewed government employees at the CDC as their "colleagues." In one email, Meta discussed providing said colleagues with access to a "reporting channel" for COVID-19 misinformation. The list of individuals with access included CDC staff, as well as employees at Reingold, a communications firm advising government health agencies.

15.5

From: [redacted]@fb.com
Date: Tuesday, April 13, 2021 at 3:50 PM
To: Crawford, Carol Y. (CDC/OD/DADC) <[redacted]@cdc.gov>
Cc: [redacted]@fb.com, [redacted]@fb.com
Subject: CV19 misinfo reporting channel

Hi Carol— Hope the week is off to a good start. We're working to get our COVID-19 misinfo channel up for CDC and Census colleagues. Could you kindly confirm if the below emails are correct for onboarding to the reporting channel and if there are others you'd like to include?

Please let me know if you have any questions.

Thank you!
Genelle

- [redacted]@cdc.gov
- [redacted]@cdc.gov
- [redacted]@cdc.gov
- [redacted]@census.gov
- [redacted]@cdc.gov
- [redacted]@cdc.gov
- [redacted]@relnold.com
- [redacted]@relnold.com
- [redacted]@relnold.com

This is just a snapshot of the messages exchanged between the CDC and Meta. They also had regular conference calls. The CDC was not the only arm of the federal government engaged in this work, of course: White House staffers also castigated Meta for not deplatforming alleged misinformation fast enough. President Joe Biden himself accused Facebook of "killing people" in July 2021.

One wonders whether these condemnations, from Biden and others in his administration—which included the specific threat of punitive regulation if demands for greater censorship were not met—influenced Meta's decision to delegate COVID-19 content moderation to the CDC.

16.1

Australian Media Reports Surge in Fatal Cardiac Arrests – Dismisses Covid Vaccine Link

by Adan Salazar

January 23, 2023

Despite the likely correlation, don't expect the mainstream media to own up to the damage caused by the experimental jab they've been paid to promote.

Media outlets in Australia took note of a sudden increase in fatal cardiac deaths within the past few months, however they downplayed links to Covid jabs which have recently been blamed for unexpected deaths.

Covering the issue over the weekend, *9News Queensland* documented the distressing trend, claiming the “pandemic has helped fuel a rise” in the fatal cardiac arrest tally.

The pandemic has helped fuel a rise in the number of fatal cardiac arrests across the country, according to a new report. [@AislinKriukelis #9News pic.twitter.com/yEq61hy5Gy](https://twitter.com/yEq61hy5Gy)

— 9News Queensland (@9NewsQueensland) January 20, 2023

The *Sydney Morning Herald* last week also covered the recent heart attack surge, reporting, “More than 10,200 Australians died of ischemic heart disease in the first eight months of 2022 – that is about 17 per cent higher than would be expected in a normal year.”

The *Herald's* report goes on to cite doctors attributing the deaths to an increase in risk factors caused by the pandemic, and cites a recent study in Australia which:

“found hospitalisations from myocarditis (inflammation of the heart muscle) and pericarditis (swelling of the membrane surrounding the heart), pulmonary embolism, heart attack and stroke were significantly more frequent after COVID-19.”

The article mentions as a side note in “rare cases” the Covid vaccines “have been linked” to myocarditis and pericarditis, but then immediately dismisses any possible causation, claiming “the [Australian] Therapeutic Goods Administration says most people get better within a few days.”

Meanwhile, researchers have deemed Australia – which has also seen a recent surge in excess mortality – a test case for the rest of the world, considering over 95% of the population is vaccinated and 70% have been boosted.

16.2

We need to talk about Australia.

95% adult vaccinated, 70% boosted. Little natural immunity bc of hard lockdowns in 2020/21.

Now having a HUGE Covid wave that began in January, never let up, and appears headed for new peaks in hospitalizations and deaths.

Full Substack coming. pic.twitter.com/Z1QNtRWAiT

— Alex Berenson (@AlexBerenson) July 16, 2022

A top Australian cardiologist has also **urged the government to halt mRNA injections** due to their connection to the sharp rise in heart conditions.

"I've seen 60-70 patients in my own practice over the past 12 months who have had similar reactions," Sydney-based cardiologist Dr. Ross Walker told the **Daily Mail** last November. "I've seen other people with chest pain, shortness of breath, heart palpitations."

"These mRNA vaccines are very pro-inflammatory," he warned. "It's very rare to have full-blown myocarditis where the hearts like a big floppy bag not pumping well. But I've seen a lot of people get chest pain, shortness of breath, palpitations, and their heart seems okay."

Others have also noted Australian data shows **Covid infection rates appear to correlate with the number of jabs received**, while infection rates among unvaccinated people appear to have remained relatively low.

Australia – non-vaccinated are the winners for minimum Covid – by a country mile!

In essence the non-vaccinated have achieved....ZERO COVID!

🤔 pic.twitter.com/sZedBQuDbP

— Jayne Potvin (@Fisherlady111) January 1, 2023

Despite the likely correlation, don't expect the mainstream media to own up to the damage caused by the experimental jab they've been paid to promote over the past two years.

17.1

CDC Knowingly Left Serious Adverse Events Off Post-Vaccination Surveys, Documents Show

JAN 19, 2023

Authored by Zachary Stieber via The Epoch Times

The U.S. Centers for Disease Control and Prevention (CDC) didn't include serious adverse events like heart inflammation on post-vaccination surveys even though the agency knew the issues could be linked to COVID-19 vaccines, documents show.

Even before the surveys were rolled out in December 2020 after the first vaccines were authorized, the CDC knew that myocarditis—a form of heart inflammation since confirmed as being caused by the Pfizer and Moderna shots—and other serious adverse events were of “special interest” when it came to the vaccines, according to a newly disclosed version of the protocol for the survey system.

The Nov. 19, 2020, protocol ([pdf](#)) for V-safe, the survey system, lists myocarditis, stroke, death, and a dozen “**prespecified medical conditions.**” The protocol was obtained by the Informed Consent Action Network (ICAN), a nonprofit that seeks transparency around health information. All of the conditions can cause severe symptoms.

V-safe is a system of surveys that was introduced during the COVID-19 pandemic to monitor vaccine safety. It was developed and is managed by the CDC.

Updated versions of the protocol list the same 15 adverse events.

None of the conditions were included in the actual surveys.

Respondents could check boxes if they experienced certain symptoms, but only 10 lower-level problems such as fever and nausea were listed as options.

“It’s deeply troubling that the CDC would construct V-safe in a manner that does not permit it to be able to easily assess the rate of harm from adverse events the CDC had already identified as potentially being caused by these products,” Aaron Siri, a lawyer representing ICAN, told The Epoch Times. “This calls into question what the CDC was really trying to accomplish with V-safe. Was it trying to assess the actual safety of these products? Or was it trying to design a system that would be more likely to affirm its previous public pronouncements regarding the safety of these products?”

The CDC did not respond to a request for comment for this article.

V-Safe Data Finally Made Public

The CDC rolled V-safe out in December 2020. Americans were told to use the surveys, which are only available [through smartphones](#), to report how they felt after vaccination.

17.2

"Through V-safe, you can quickly tell CDC if you have any side effects after getting the COVID-19 vaccine," one poster promoting the tool stated.

Users were asked how they felt, whether they had a fever, their temperature, and common symptoms. They were also asked whether they were unable to work or go about their daily activities, and whether they needed medical care.

About 10 million people signed up through July 31, 2022.

The CDC has described the results of V-safe in multiple studies, but refused to release the raw data until ICAN brought litigation against it. Data released to ICAN in October 2022 showed that more than 3.2 million people sought medical attention or missed school, work, or other normal activities following vaccination.

The CDC posted some of the v-safe data on Dec. 1, 2022, several months after a self-imposed deadline passed.

Hiding Free-Text Entries

V-safe users could report the serious adverse events, but only if they wrote them out in a free-text field.

The prompt was, "Any other symptoms or health conditions you want to report."

The CDC has resisted releasing the results from the field, insisting that it would be too onerous to review the 6.8 million entries for personally identifiable information (PII), according to a joint status report made to the court in November 2022.

The agency declined a request from ICAN to provide a random sample of a few hundred entries, which plaintiffs say would back their argument that the entries likely hold little or no PII such as names and addresses.

The entries are important because they would show how many respondents reported experiencing the prespecified adverse events like heart inflammation.

The CDC instead offered to review all the entries and convert them into medical codes, according to the filing.

"It was apparently willing to do this because, even though it would have been more time consuming and complex than simply reviewing for PII, this approach would permit the CDC to hide from the public most of what is actually written in the free-text fields," ICAN said in the document.

18.1

Medical Professionals-Turned-Whistleblowers Expose Houston Methodist Hospital's Early COVID-19 Vaccine Mandate

January 31, 2023 Jim Hoft

On Sunday, **Five-time Emmy Award winner Sharyl Attkisson** aired an investigation on her show **Full Measure** in which she spoke with former employees of Houston Methodist Hospital, the first hospital in the country to implement a mandatory Covid vaccine policy.

On March 31, 2021, Houston Methodist Hospital became the first hospital system in the United States to mandate vaccination for all employees.

According to **NEJM**, "Two percent of employees and physicians were exempted for medical or religious reasons, 158 employees without exemptions were terminated for failure to comply, and one employed physician chose to resign. A small group of former employees raised a legal challenge to this mandate, which was summarily dismissed by U.S. District Judge Lynn Hughes, who stated in his ruling, "Methodist is trying to do their business of saving lives without giving them the Covid-19 virus. It is a choice made to keep staff, patients, and their families safer.""

On Sunday's episode of Full Measure, Attkisson interviewed a group of seasoned doctors and nurses who got suspended and ultimately terminated for refusing to comply and question the unconstitutional COVID vaccine mandate.

One of the many doctors who has spoken out against Methodist Hospital is **Dr. Vinay Julapalli**.

Dr. Julapalli created an email group with over a thousand of his colleagues to debate and discuss the risks of the COVID vaccine. He said that many of his colleagues would only feel comfortable sharing their thoughts with him in private.

"The level of fear among our colleagues, among the medical staff in terms of expressing their opinion, whatever it was, because they were afraid that they were going to be retaliated against by the institution. Houston Methodist was off the charts and continues to be off the charts," Dr. Julapalli told Attkisson.

Like Dr. Julapalli, oncologist and hematologist **Dr. Mary Crow** "lost privileges to practice medicine" at Methodist Hospital for refusing the vaccine.

"You have the right to put up your hand and say, what the hell is going on here? Please explain this to me and not risk obliteration of your personal and professional life," said Dr. Crow.

Dr. Mary Talley Bowden, an ear, nose, and throat (ENT) specialist, was also suspended from Methodist Hospital.

The Gateway Pundit reported in November 2021 that Houston Methodist health officials began investigating and suspended Dr. Bowden for spreading "dangerous misinformation" about Covid-19 and promoting the efficacy of ivermectin, prompting the physician to resign from the hospital.

18.2

The hospital excoriated Bowden for "using her social media accounts to express her personal opinions about the COVID-19 vaccine and treatments," NBC News **reports**. The suspension barred the physician from admitting or treating patients at the hospital.

Bowden repeatedly warned that it is "wrong" to mandate the experimental mRNA vaccines and continuously touted Ivermectin as a safe and effective treatment amid threats from public health officials against prescribing the drug.

"I've tested over 80,000 people for COVID and that's what first alerted me to what was going on, because we keep track of who's vaccinated and who's not," Bowden told Attkisson.

According to Dr. Bowden, more vaccinated people were testing positive and sicker than the unvaccinated.

"And the patients who were vaccinated and testing positive were just as sick, if not sicker, than the ones that weren't. And eventually, I saw more vaccinated patients testing positive than unvaccinated, and that's when I really became vocal, and Methodist did not like that," Bowden continued.

Watch the video below:

The statement from Dr. Bowden is true. After three years of the pandemic, more and more research points that repeated vaccinations make people more vulnerable to COVID and contribute to the rapid evolution of the virus.

A recent article **published** in the Wall Street Journal suggested that the Covid outbreak heavily affected most vaccinated people.

Health officials in New York City are **alerting** its vaccinated residents or those previously infected with COVID-19, stating they "may be" at a higher risk of contracting the infectious Omicron subvariant XBB.1.5.

According to recent data from over 8,000 **Walgreens** stores in the United States, the unvaccinated have the lowest incidence of COVID-19 and vaccinated people are more likely to test positive.

This trend is also seen in other countries.

According to **New South Wales'** epidemiological weeks 51 and 52, ending December 31, 2022, 86% of the deaths and 80% of hospitalizations were vaccinated.

Only 6% of the death rate is unvaccinated and zero hospitalization.

In **Canada**, independent researchers of the highest caliber evaluated government data from Ontario. The experts conclude that the Covid-19 vaccines are not 100% effective in preventing infection and hospitalization even with booster shots.

18.3

There are six times more cases that are vaccinated versus unvaccinated currently in ICU and 5 times more vaccinated cases that are in the hospital compared to unvaccinated cases.

According to the medical professionals in Methodist Hospital, the "vaccine mandate didn't make patients safer at all."

Not only that, but they detailed multiple incidents of vaccinated workers reporting sick to work.

"At that time, the management and methods ICU forced two nurses to come in sick, positive with COVID, with symptoms, fevers, and take care of patients in the ICU. So that completely obliterates the argument as far as patient safety, because there's nothing more unsafe than having sick nurses taking care of immunocompromised patients in the ICU," said Owen Robinson, a critical care registered nurse.